Evaluations in the ETH Domain

1. Initial position
According to art.25 para.1 al.c of the ETH law, the ETH Board is responsible for the strategic controlling of the ETH Domain. The most widely used tools for strategic controlling are indicators and evaluations.
The scope of the indicators has been set in the performance mandate 2004–2007. They describe the general development and the achievement of selected goals as laid down in the performance mandate. In effect, the indicators help to answer the question, “are we doing the things right?”
For strategic controlling the question “are we doing the right things right?” is far more important. Evaluation is the tool that helps to answer this question.
At present, evaluations are carried out at different levels throughout the ETH Domain on a routine basis. However there is no formal common ground at the level of the ETH Board on objects of evaluation, terms of reference, election of the peers, periodicity, reporting and follow-up on recommendations.

2. Demarcation
Accreditation is a condition for high quality teaching. It is a formal and transparent procedure where it is checked if the institution or the program adheres to some minimal standards. In a way the procedure has something absolute as the minimal standards are set and the question is, does the institution or the program under review fulfil this standard.
Evaluation by contrast contains a relative element. Out of a specific situation questions are asked to a committee of experts. Their answer will not reflect an absolute truth but their opinion on the question asked. There it is recommended to make use of standards1

3. Objective
Based on on-going practice, this paper proposes a common, limited set of rules on future handling of evaluations at the level of the ETH Board.

4. Current role of the ETH Board
To date the ETH Board has four distinctive activities:
• to commission the periodic evaluations of the Research Institutes.
• to monitor the evaluations commissioned by either ETHZ or EPFL
• in out-of-line situation to commission evaluations on special topics such as the future of the CSCS or the viability of the SLS-project.
• to arrange for the processing of the intermediate evaluations
Two new developments will complicate the matter even more.
Firstly, the creation of competence centres which will need an evaluation on a periodic basis.

If the ETH Board was to commission these evaluations it would probably become entangled with the evaluation programs already devised by the schools.

Secondly, the MoU\(^2\) of the R.I. gives them a size which compares to the schools. This provides the opportunity to handle their evaluation the same way as the schools.

5. **Proposed role of the ETH Board**

We therefore propose to limit the commissioning of evaluations by the ETH Board to situations that are seen well-founded by him. All other evaluations should be overseen by the ETH Board and governed by the common set of rules presented hereafter except the intermediate evaluations which are overseen by the secretariat of state.

6. **Content of the set of rules for evaluations monitored by the ETH Board**

A. Departments, faculties, research institutes and projects have to be evaluated at such a frequency that the whole institution (ETHZ, EPFL, MoU tied R.I., Competence Centres) can be covered in 8 years.

B. The Board will be informed about the planned evaluations for the next 2 years and given a yearly update of the plans.

C. Research, teaching and technology transfer issues will have to be equally addressed.

D. The terms of reference will have to link with the specific objectives of the subject of the evaluation and address at least the following topics: \(^3\)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td>The international recognition and innovative potential of the subject under evaluation.</td>
</tr>
<tr>
<td></td>
<td>The satisfaction with the obtained degree.</td>
</tr>
<tr>
<td>Productivity</td>
<td>The total output of the subject under evaluation, expressed by bibliometrics, technometrics(^4), licenses or more common indicators like the number of delivered degrees or the number of students or doctorates.</td>
</tr>
<tr>
<td></td>
<td>The input in terms of human resources and funding is to be taken into account.</td>
</tr>
<tr>
<td>Relevance</td>
<td>Assessment of the impact of the work. The choices in research, teaching and technological transfer arc to be compared to overall developments in society and science. Both quantitative and qualitative methods can be used.</td>
</tr>
<tr>
<td>Internal and external dynamic</td>
<td>The ability to close research or education lines that have no future and to initiate new ventures projects.</td>
</tr>
<tr>
<td></td>
<td>The capacity of the management to run projects in a professional way.</td>
</tr>
</tbody>
</table>

E. The evaluation committees need to be diverse in respect of nationality, expertise and experience, age and gender.

---

\(^{1}\) Memorandum of understanding signed by PSI, WSL, EMPA, EAWAG to reinforce cooperation 10.12.04


\(^{3}\) Patents and citations of patents
7. Distribution of tasks between ETH Board and management of the institution

The main objective of this chart is to demonstrate that evaluation is a continuous process, thus the circle. In addition, it shows where and for which items the ETH-Board comes into the picture, these are steps [written in bold] 2, 3, 11 and 12. Furthermore, it indicates the steps for which the set of rules presented in paragraph 6 is to be applied, these are 1, 2, 3, 4, 5, 11 and 12. The reason for having step 2 and 3 is that it should give the other institutions the opportunity to coordinate evaluations plans. It might be more rewarding to evaluate the same disciplines concurrently throughout the domain with possibly the same experts.

8. Consequences

The ETH Board should in future only commission evaluations in well-founded situations. All other evaluation should be overseen by the ETH Board and therefore commissioned by the management of the institutions themselves. They will be governed by the common set of rules presented above. The number of evaluation which will be brought to the attention of the ETH Board will grow, as all departments, faculties, research institutes will have to be evaluated within a time-span of 8 years. Therefore, follow-up of the action list will require some attention to prevent that sensible recommendations are forgotten or collide with newer results. The recommendations of the intermediate evaluations will be converted into immediate actions when ever possible or integrated in the next strategic plan.
9. Planned evaluation in the ETH Domain in the next two years
The EAWAG which has been evaluated in 2003 hasn’t planned any activities in the next two years.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Native spelling of organization or area to be evaluated</th>
<th>English spelling of organization or area to be evaluated</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHZ</td>
<td>D-ARCH</td>
<td>Dept. of Architecture</td>
<td>actual</td>
</tr>
<tr>
<td>ETHZ</td>
<td>D-PHYS</td>
<td>Dept. of Physics</td>
<td>2005 Winter</td>
</tr>
<tr>
<td>EPFL</td>
<td>Faculté SB Chimie Physique Mathématiques</td>
<td>Basic science Chemistry Physics Mathematics</td>
<td>2005 January 2005 May / October 2005 November</td>
</tr>
<tr>
<td>ETHZ</td>
<td>D-MAVT</td>
<td>Dept. of mechanical and process engineering</td>
<td>2006 Winter</td>
</tr>
<tr>
<td>ETHZ</td>
<td>D-GESS</td>
<td>Dept. Humanities, Social and Political Sciences</td>
<td>2006</td>
</tr>
<tr>
<td>EPFL</td>
<td>Faculté ENAC</td>
<td>School of Architecture, Civil and Environmental Engineering</td>
<td>2006 First Semester</td>
</tr>
<tr>
<td>EPFL</td>
<td>Faculté SB</td>
<td>School of Basic Science</td>
<td>2006 Second Semester</td>
</tr>
<tr>
<td>PSI</td>
<td>Radiochemie</td>
<td>Radiochemistry</td>
<td>2006</td>
</tr>
<tr>
<td>PSI</td>
<td>Radiopharmazie</td>
<td>Radiopharmaceutical science</td>
<td>2006 but subject to coordination with ETHZ &amp; USZ</td>
</tr>
<tr>
<td>PSI</td>
<td>Verbrennungsforschung / Stofffluss</td>
<td>Combustion research / material cycle</td>
<td>2006</td>
</tr>
<tr>
<td>PSI</td>
<td>Zustand Protonenbeschleunigeranlage</td>
<td>Condition of proton accelerator</td>
<td>2006 (to be confirmed)</td>
</tr>
<tr>
<td>EMPA</td>
<td>Wissenschaftliche Aktivitäten durch FOKO C (mit internationalen Experten)</td>
<td>Scientific activities by international experts</td>
<td>2006 Spring</td>
</tr>
<tr>
<td>WSL</td>
<td>Gesamtaaktivitäten</td>
<td>Full scope</td>
<td>2006 2nd semester or 2007 1st semester</td>
</tr>
<tr>
<td>ETHZ</td>
<td>D-BEPR</td>
<td>Dept. of economics and production</td>
<td>2007 Spring</td>
</tr>
<tr>
<td>ETHZ</td>
<td>D-MATH</td>
<td>Dept. of Mathematics</td>
<td>2007 Winter</td>
</tr>
<tr>
<td>EPFL</td>
<td>Faculté STI</td>
<td>School of Engineering</td>
<td>2007 First Semester</td>
</tr>
<tr>
<td>EPFL</td>
<td>Faculté SV</td>
<td>School of Life Sciences</td>
<td>2007 Second Semester</td>
</tr>
</tbody>
</table>
10. Decision
On the proposition of the President, the ETH Board decides:

1. The members of the ETH Board approve the presented paper.

2. The Presidents of both ETH and to the Directors of the Research Institutes will take the appropriate steps to enforce the new roles.

3. Copies to Presidents of both ETH and to the Directors of the Research Institutes.

Binding version in German and French thereafter:
Rat der Eidgenössischen Technischen Hochschulen

ETH-Rat

Auszug aus dem Protokoll
Bern, 23. März, 2005

Evaluationen im ETH Bereich

Auf Antrag des Präsidenten wird

beschlossen:

1 Dem vorliegenden Papier wird zugestimmt.

2 Die Präsidenten der beiden ETH und an die Direktoren der Forschungsanstalten leiten die notwendigen Schritte zur Umsetzung der neuen Regeln ein.

3 Mitteilung an die Präsidenten der beiden ETH und an die Direktoren der Forschungsanstalten zur Information.

Für die Richtigkeit:

Der Präsident des ETH-Rates                Der Protokolfführer des ETH-Rates
Conseil des Ecoles polytechniques fédérales

CEPF

Extrait du procès-verbal
Berne, le 23 mars 2005

Evaluation au sein du domaine des EPF

Sur proposition du président,

il est déclaré:

1. Le document présenté est adopté.

2. Les présidents des deux EPF et les directeurs des établissements de recherche prennent les mesures nécessaires pour mettre en application les nouvelles règles.

3. Communication aux présidents des deux EPF et aux directeurs des établissements de recherche pour information.

Pour extrait conforme:

Le président du Conseil des EPF

Le rédacteur du procès-verbal du CEPF