Conceptual Competition

ETH World

virtual and physical presence

in the Internet and in Zurich/Switzerland

ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Conceptual Competition

ETH World

virtual and physical presence

in the Internet and in Zurich/Switzerland

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

TABLE OF CONTENTS

Hönggerberg

Center

Areaplan Zurich with ETH locations

SUMMARY, MAIN TASK & CRITERIA

SUMMARY OF THE OVERALL PROJECT

ETH World - What is it all about?

ETH World is a project of strategic importance for the future of the ETH Zurich. With ETH World the existing physical locations, "Zentrum" and "Hönggerberg", will be augmented by a virtual space, which can be regarded as a virtual campus.

With ETH World the physical infrastructure and communication will be integrated to form an infostructure. This infostructure is the backbone, around which a diversified virtual space can be built. Different entrances (portals) lead into this virtual space, which itself is divided up into subspaces. This space is made dynamically utilizable through this accessibility. All members of ETH will have the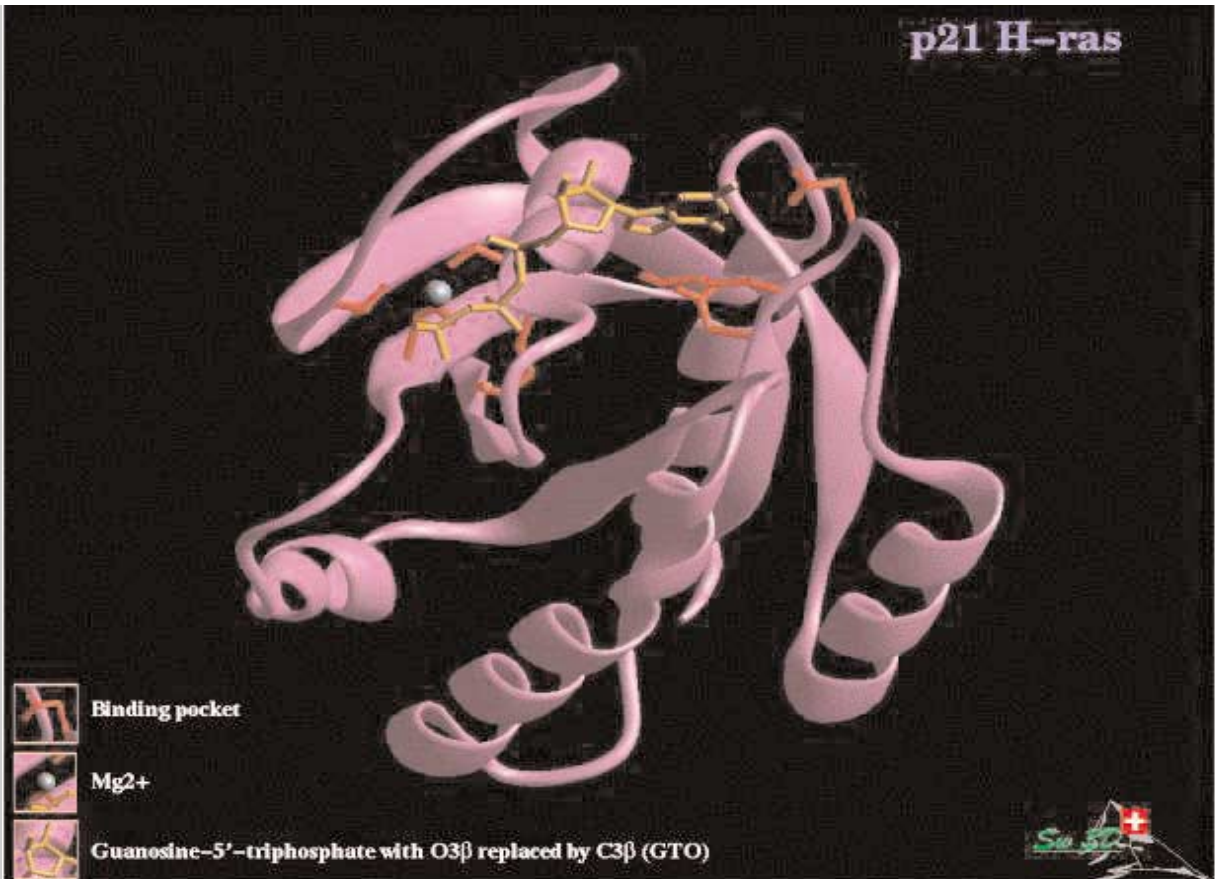 opportunity to input structure to this virtual space and make it flexible and equipped for future needs. This space with the name ETH World extends the existing infrastructure and supports research, teaching and learning as well as administration at ETH Zurich. Due to the various ways of organizing this virtual space ETH World will become an exciting journey into the future, which is just beginning.

Three steps towards ETH World in the year 2000:

a. An international competition on concepts for creating a virtual space is put out to tender. Creative teams world wide are invited to participate in the competition including members of ETH.

b. Pioneer projects including hardware and software projects as well as conceptual projects, which are accepted and financed by the management of the technical university (Schulleitung) will be realized. In the future all ETH members can submit projects to the ETH World commission. Evaluation of all projects will go through a peer review.

c. A Wireless Network (WLAN) will be established in selected locations of ETH Zurich. Those can include lecture halls, seminar rooms, the Mensa (commons) and study spaces. This project will complement the specialized high-bandwidth areas to provide mobile access to information, particularly for learning.

"research" (found at the chemistry department at the University Fribourgh under http://sgich1.unifr.ch/visu.html)

"education": the interactive fly" at http://sdb.bio.purdue.edu/fly/aimain/1aahome.htm

SUMMARY OF MAIN TASK

Imagine a campus, a virtual one. Design this campus! You are asked to submit a conceptual design - a strategic masterplan. ETH World is primarily an infostructure project to be conceived in a virtual space and virtual dimension. We are looking for an ingenious and realizable concept for the integration of people, new media, research, learning, and the existing architecture of the ETH Zurich within a global context. The development of a design vision must take the following items into account:

I. ETH World should be understood as an instrument to improve existing and to promote new methods of research and education, without being an open university in the classical sense of distant learning. A significant expansion in the teaching and learning culture will lead to an improvement in the relationship between students and staff (learning teams), thus eliminating unnecessary hierarchical structures. The autonomy and responsibility of individuals for their own personal development should be greatly enhanced in the future. Intellectual discourse between all members of the ETH community will be intensified and lifelong learning and collaboration will be fostered. It will act as a comprehensive platform for visual and aural (audio) communication, furthering the growth and advancement of knowledge. This key purpose - pertaining to the development, compilation and presentation of scholarly material - should be a main objective of the proposed design schemes.

Research and Education

II. ETH World should act as a community-forming entity. Identification with the academic institution needs to be fostered. Its users - students, teachers, researchers, staff members, alumni, and associated individuals - form a collective. The campus as a virtual territory fulfils in this sense a symbolic function in regard to the identity of the ETH community. This image-forming role of ETH World must be addressed by the proposals submitted.

Interactive Community

III. ETH World is a network for communication and interaction. It enhances the human-machine and human-machine-human interface. Insofar as most users own or have direct access to communication devices, ETH World provides the interconnection network for the complete exchange of information. This question of the ingenious organization of digital and information technology must be integrated into the design proposals.

Human and Machine Interface

IV. ETH World will comprise a space through which to navigate and communicate with other users. Its organizational structure and the quality of its visual appearance will play a substantial role in providing accessibility and ease of movement to prospective users. The structural and formal properties of this space as well as the means of navigation will need to be addressed conceptually by the design proposals.

Structural and Formal Framework

V. ETH World will comprise different territories of various degrees of accessibility ranging from exclusively private to highly public domains including gradations therein. Each user will operate from a home base moving gradually from one territory to another. The formation of several roles and identities should be possible. Groups of users might form an enclave within the system or create a collective platform from which to operate. This field of interconnected, partially overlaid, or juxtaposed territories is to be taken into consideration by the proposed schemes.

Public and Private Territories

"virtual"

"physical"

VI. ETH World could be viewed as an assemblage of heterogeneous components. Whereas its structure might be that of a loose assembly, essentially decentralized in its overall organization, hierarchies will, as necessary, be introduced locally. Access will be provided by means of multiple entry points. This combination of decentralized and centralized organizations should be a constituent part of the designs.

| Multiplicity |

VII. ETH World implies the chance to develop the existing multilingual qualities of the ETH and Switzerland to a new scientific culture within the ETH and in a global dimension.

| Multilinguality |

VIII. ETH World should be conceived as a dynamic system in a state of perpetual evolution. While its structure and the elements of its formal appearance might be partially defined, the system will nevertheless need to be able to accommodate unforeseeable changes. Users will contribute actively to the growth and transformation of the system. The framework suggested needs to be open and adaptable in its structure. The technical implementation behind the proposal has to support the requirement of openness and adaptability.

| Dynamic System |

IX. ETH World, following the tradition of the ETH Zurich as a public institution, pursues a role of cultural significance. It must adhere to the current ethical standards of the ETH Zurich. The proposals need to comply with this overriding objective.
http://www.ethworld.ethz.ch/doc/bot.pdf

| Socio-Cultural Implications |

X. ETH World, while primarily belonging to the realm of virtual reality, must closely interact with the physical reality of existing and future facilities. The relationship between the virtual and the physical spaces must be addressed in its structure and formal manifestations. This dialogue as well as potential forms of its implementation - both within the virtual and physical domains - must be at the core of the ideas presented. ETH World should enhance the value of physical campuses. This implies as well the concentration and improved utilization of existing and future infrastructures.

| Virtual and Physical Space |

ETH World provides a unique opportunity for distinction by achieving a much higher degree of integration of people, new media, research, learning, and the existing architecture of the ETH Zurich within a global context. This will be all the more necessary as increasing decentralization and individualization present a growing demand for symbols that allow identification with the university as well as for a strengthening of community spirit.

To this end, one part of the competition task requires solutions to the challenges of setting up these new virtual opportunities. The virtual reality is to be set in relation to the physical presence of the ETH Zurich, and both are intended to develop a common identity. For that, also the physical reality (buildings, visual appearance, infrastructure) must take account of this new identity which is made possible by the virtual campus.

The ETH's outward appearance on both the virtual and the physical levels should facilitate identification and continuation of the university's global activities. The goal is the widest possible acceptance of the project and its active support by both ETH members and the general public. To this end, concepts are required for structural alterations, design elements, events etc. which will result in a sustained positive presence of the ETH and thus in a new corporate identity
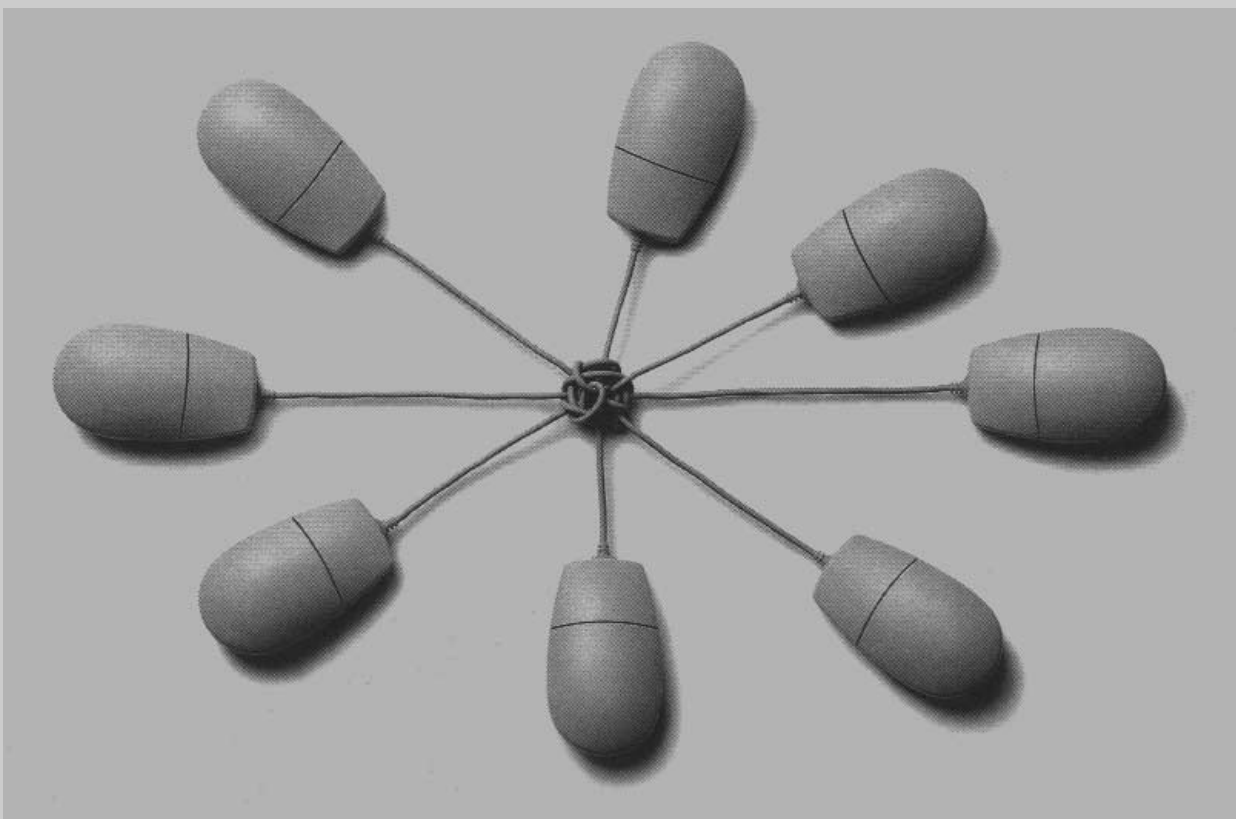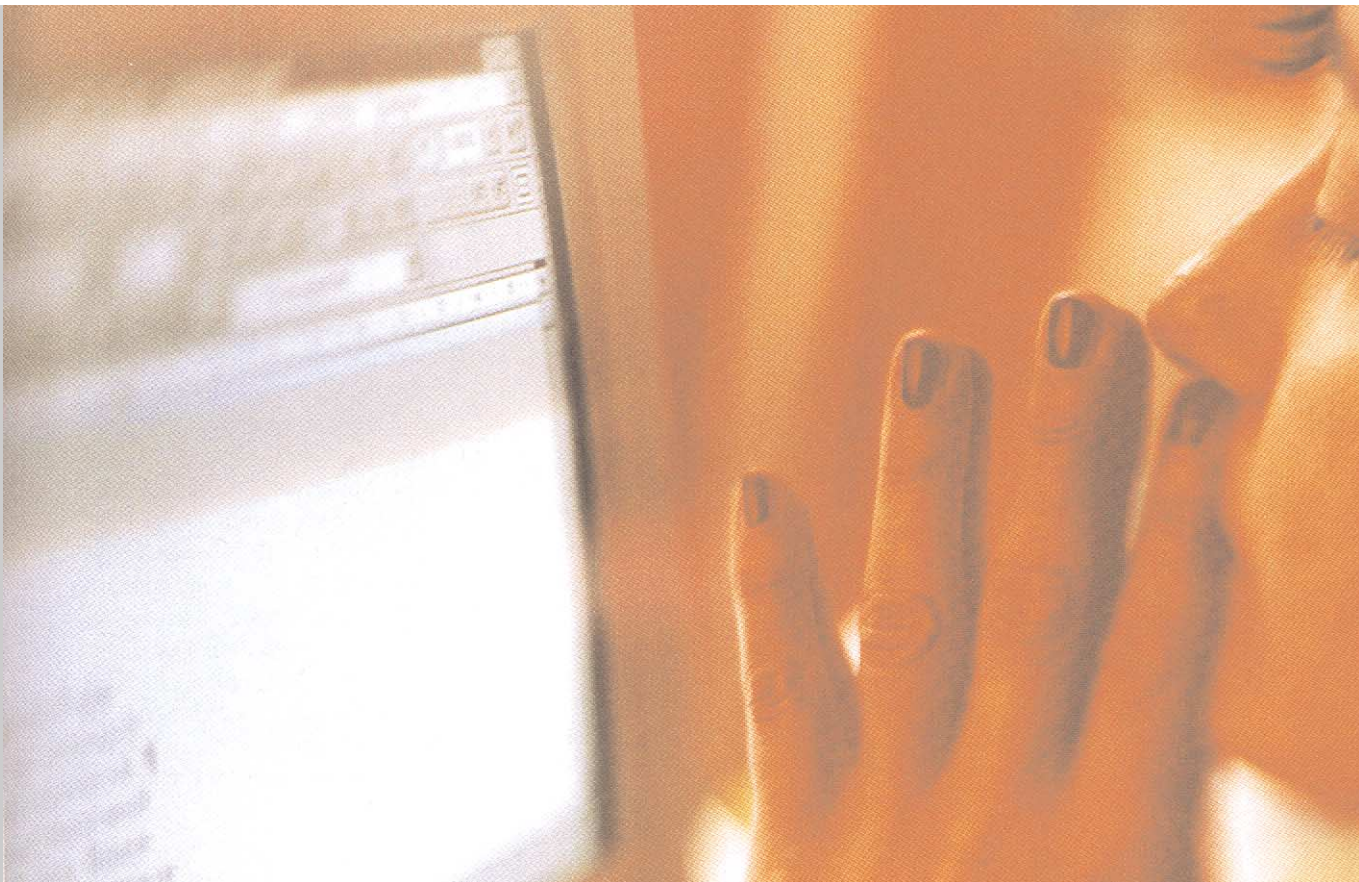
10 GOALS

1. ETH World will support and augment research facilities with new types of communication technologies. ETH World will offer to education a vital platform for time- and space-independent, collaborative and learner-oriented activities. Special emphasis will be given to continuing education and life-long learning.

2. ETH World will improve access to scientific and administrative, existing and new services.

3. ETH World will connect the virtual and the physical spaces.

4. ETH World will provide optimal communication as well as globally accessible information, not least by breaking down linguistic barriers.

5. ETH World will strengthen the different ETH departments and their interdisciplinary collaboration.

6. ETH World will create synergies through the integration of advanced research, education and infrastructure.

7. ETH World will extend areas of research with regard to the requirements of an information society.

8. ETH World will support students, employees, professors and alumni of the ETH Zurich in their efforts to promote the development and globalization of the ETH community.

9. ETH World will provide a forum for cooperation and knowledge transfer for the benefit of business, politics, non-governmental organizations (NGOs) and society as a whole.

10. ETH World will enhance the ETH's attraction for potential students, cooperation partners and faculty members as well as for sponsors and professional bodies.

EVALUATION CRITERIA

The criteria of the jury are primarily based on the main task and goals, further on they consider realization aspects and formal aspects concerning the requirements for the presentation of the work (v. page 24).
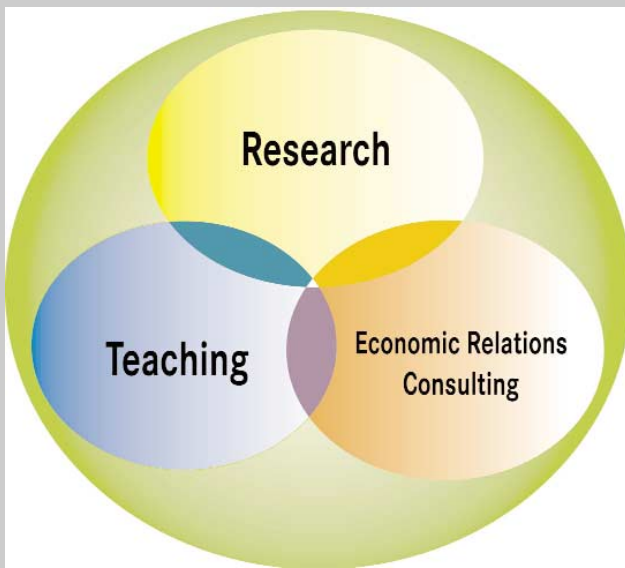
mutual integration and augmentation of research, education and service activities / interaction with external partners
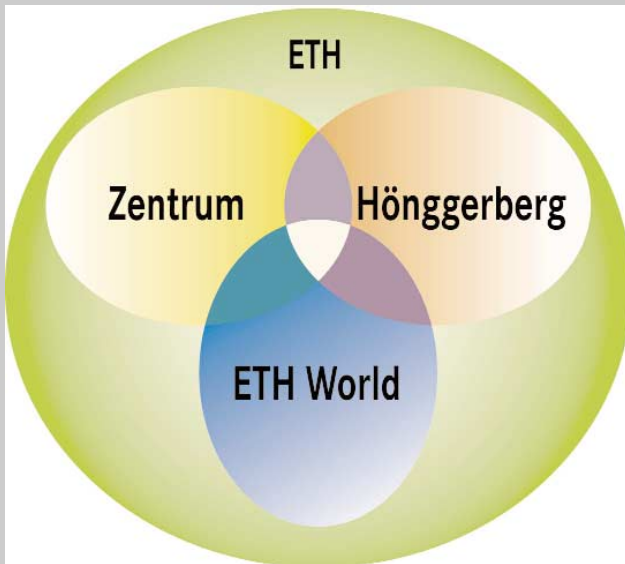
integration of the physical and virtual spaces

interaction

TASK

With its scientists, its students and its performances in research and education, the Swiss Federal Institute of Technology (ETH) occupies a prominent position among the world's top research and educational establishments. 18,000 people from Switzerland and other countries study, teach, research or work at the ETH Zurich, while its graduates can be found living and working all around the world. The ETH Zurich intends to strengthen and extend its global presence and competence in research and education. To this end, it initiated the "ETH World" project in 1999.

The core of ETH World is a virtual campus which will open to the ETH community new dimensions and qualities of communication and information, promoting the enhancement of:

a. mutual integration and augmentation of research, education and service activities,

b. interaction between the ETH and external partners,

c. integration of the physical and virtual spaces.

A central goal of ETH World is to complement and augment the two main existing ETH locations in the centre of Zurich and at Hönggerberg: ETH World will become a third campus, a virtual campus, offering novel scientific and cultural life and intensifying the links to and between the physical sites.

What is being asked for is a networked information and communication architecture for buildings and people, an architecture which will upgrade existing physical structures in various ways.

The task set in the competition consists of the development of a design concept for the setting-up, operation, together with the capacity for further development of a virtual space (ETH World) that complements and enhances the ETH's physical space. Within this framework, ETH World will become a virtual home for the ETH community's present and future members. This home will succeed if input is given by the users and continuously upgraded by the managers of ETH World.

In addition, a concept has to be designed that sums up and symbolizes the ETH's identity with all its facets and history, which in their turn will be affected by the setting-up of ETH World. This identity is to be created both by projects, symbols or icons in virtual space and by their counterparts in the real, physical world, and must establish a link between the two.

The main task is to exploit, in an innovative way, the possibilities provided by the medium for the creation of new, dynamic forms of communication and scientific work in education and research, and to impart the knowledge of this to all parties concerned.

It is the competition's goal to sharpen the ETH's image in the global market. In view of the increased competition between educational institutions, the ETH Zurich needs to establish and actively promote its position. The networking approach is meant to strengthen general awareness of the ETH's identity through intensified presence in the eye of the public, the combined impact of

Invitation to tender

a sophisticated technology and cutting-edge design and implementation, increased integration of alumni, and the targeted promotion of the ETH as a global community. The ETH sees itself as a future-oriented university where today's men and women deal with tomorrow's technology and tackle the problems that will arise only the day after tomorrow, all that in full awareness of their responsibility in the area where people, technology and environment interact. As far as knowledge-oriented fundamental research and a sustainable problem-solving approach are concerned, the ETH is a reliable partner of business, politics and society in general, and this is also true at the educational level where study courses are provided that will enable ETH graduates to propose forward-looking solutions to problems encountered in their respective fields.

The sponsor is aware of the fact that the entries to the competition's first phase will not answer all these requirements. It is intended that participants will have to develop strategies and present examples that are sufficiently flexible and expandable to allow for the integration, at a later stage, of missing features and of the results of future developments.

VIRTUAL SPACE

DESIGN

Interface Design

The interface should be shaped and organized so that a majority of people will accept and be able to use the given framework. The existing corporate design concept should be taken into account.

Navigation

ETH World is a virtual space with subspaces. Each subspace is characterized by the particular possibilities it offers, and different access rights. As in a physical space, the user should be able to remain oriented; a suitable security concept should enable appropriate access. Unlike physical spaces, however, the dynamic quality of virtual media must be taken into account.

The navigation concept needs to bridge all kinds of barriers, not least the generation barrier. Many people, youngsters and people with economic background working in finance and industry or small companies are much more visual oriented than many scientists at ETH.

An innovative and comprehensive navigation design should be outlined in the overall plan for ETH World.

Portals

Both the interface design and the navigation design have to consider that ETH World will be entered through various portals. Although many users will enter through „side entrances" each main user group should have a main portal.

CONTENTS

The basic components of the project are described below. The division of content given here is by no means fixed and is not essential to the realization of ETH World.

The population of ETH World consists of the current individual members of ETH Zurich, alumni, external industry partners and academic guests at various locations around the globe. The different departments of the ETH are group members in the community. Everyone participating in ETH World may be a user, a creator or both.

Population of ETH World

Each of these members and groups should have their individual "office", logically located and structured, with information such as their CV, address, position at ETH and so on. Examples can be seen at:

http://n.ethz.ch/student/juschulz/
http://n.ethz.ch/student/brandesi/

At the same time, ETH World is the link between the ETH community and the web-community.

The two pillars of the ETH are research and education. The intent is to augment these with an „infostructure" that benefits each single member of the community and thus the entire ETH. The ETH World forum and its tools for research and education will be based on existing models. Nevertheless it is expected that interactive methods, interdisciplinary processes and the integration of research and education will gain particular benefit or even be newly developed. New opportunities to meet and exchange will be presented, enhancing communication and collaboration within the ETH as well as with exterior partners.

Research and Education

New ways of interaction and communication will augment research and education and their relationship to each other. The documentation of research can more easily become part of education and vice versa. Remote cooperation with co-workers should be possible. Intelligent roomware and work-environment tools such as interactive tables and walls help to realize these goals.

It should even be possible to create a virtual institute structure in the framework of ETH world. People may define virtual institutes based on existing collaborations for research, teaching or administration, independent of the „real" department/institute structure of the ETH. Communication is thus paramount.

Significant new qualities in research and education might evolve through intelligent, self-learning software, recognizing the habits of the users.

Research in general is recognized as a dynamic process, developed anew in each project. Due to different research methods, there will be many different ways to integrate the contents ETH World will offer. Work in the chemistry or biology laboratories will not be replaced, but one can imagine, for example, virtual research in fields like computer science or architecture.

Research

Invitation to tender

Central improvements facilitated by ETH World will be the stimulation of communication and the expansion of shared information as well as better accessibility and connection to that shared information.

ETH World should provide platforms for the dynamic formation of inter- and transdisciplinary research clusters - polyprojects and centres of excellence. It may even generate virtual institutes where participants set up comprehensive collaborations concerning research, teaching and administration.

Last but not least, ETH World itself will be a research and development issue, if important components are missing and not available elsewhere.

Another focus is interaction with partners in the business world, especially important in research in the applied natural sciences. ETH is very productive in its spin-off sector. Spin-off companies are multipliers in the ETH alumni community and should be given an appropriate presence in ETH World.

In a recent project by the Department of Architecture, called "Phase(X)", researchers and students have developed and tested an environment that contains many of the important aspects of ETH World. The project can be visited at http://space.arch.ethz/ss99/

Ways of education have been developed and proven over many generations, but more dynamic and comprehensive educational forms may evolve from the combined use of classical and virtual tools.

Education

Certainly ETH students should be able to download lectures and seminars or attend classes remotely and interactively. Integration into normal lectures of information originating in ETH World, and automatic storage of lectures is a further goal.

It is expected that submissions make proposals discussing the development of new models of teaching, learning, creative interaction, the introduction of new technical equipment and their didactic impact. A first example is examined in the initial project "Chemistry-Contact-Forum" (http://deix.ethz.ch/). Another example might be implementing a way for small groups of students to post questions interactively and to discuss via a „pinboard" while a lecture takes place. The lecturer could decide whether to answer the questions immediately or at a later stage.

Overall, these models should offer even better quality to the students to help them to organise their learning most effectively and efficiently. There will be new options for transdisciplinary curricula, modular systems with the students having higher individual responsibility for their studies.

ETH World does not intend to provide the usual distance learning services. However, such remote courses can be envisioned for certain study areas with a few students scattered all over the world. Later, there should be the possibility of joint degrees in collaboration with other institutions.

Communication with external partners such as small companies, economic and financial institutions and political authorities should be enhanced. The functionality of collaboration and knowledge transfer as well as an internship service with industry partners should be integrated.

Economic relations / consulting

An attractive virtual meeting point for industry contacts and collaboration is required. Analogous to virtual institutes, it should in general be easy to set up an „egroup" for any purpose. ETH World should provide the necessary tools to

arrange a closed virtual office for the egroup, the team. The virtual space thus created should support interactive work as well as asynchronous work, independent of time and location.

Focused consulting as service for external parties could be organized within the framework of a business division in ETH World. Activities can reach from consulting to cooperation with business partners.

The ETH offers numerous services, both to internal and external clients. ETH World should become a logical platform for quick information and administration. There are practical services for internal administration such as travel services, mail, purchasing and printing, but there are many other more specialized services that might be offered, such as the central computer services, enhanced in ETH World. Ways to advertise and deliver these services need to be enhanced in ETH World.

Services

http://www.dienste.ethz.ch/
http://www.n.ethz.ch/
http://www.ethtools.ethz.ch/
http://www.id.ethz.ch/
http://itproeth.ethz.ch

New services like a virtual expert pool for patent issues would be very helpful as currently only contacts to external patent attorneys are mediated. There could be an ETH company which deals with the patent issues arising out of the work of groups at the ETH.

Another service with potential growth will be network access to programs. The use of locally installed programs will decrease; more and more software will be executed from ETH servers.

Much of this project is concerned with various forms of communication. There are platforms where users come together, there are data bases where people receive information from and there are places where people can give their input.

Communication

Communication within ETH will, in all essential spheres, be done via new media in the framework provided by ETH World. New communication forms and therefore a new culture should serve to overcome established structural and spatial barriers. The formation of new informal contacts among the ETH community should be initiated and simplified by these new communication forms.

Individual communication is based on lifelong access to an email address, a personal account with disk space and ETH World. On the hardware-side, it has already been proposed that students be supported in purchasing their computers with discounts and preinstalled software.

Individual communication

Some basic information should be available about all members of the ETH community - research and other interests, responsibilities and skill sets. Virtual analogies for private meetings between two users and other levels of privacy are desirable. The personal environment has to be flexible and must be adaptable to users' needs.

Multiple communication should be supported by intelligent message systems as successors to todays' newsgroups. In future there must be

Multiple communication

Invitation to tender

many more, much faster and more efficient channels and custom-made tools for multiple communication.

ETH World will be the platform for internal mass media. An electronic version of the internal ETH newspaper, updated daily, will be developed, as will an enhanced version of the student television channel (http:// www.uv.ethz.ch). Later, a campus radio could augment other communication tools. More usual communication channels such as exhibitions will increasingly have a multimedia component. Daily news offerings must be adjustable to suit personal interests.

There should be a collection of dynamic newsgroups available which provides an information service that adapts almost automatically to the habits and interests of the individual user. A few keywords should be enough to find the appropriate newsgroup. The automatic management of newsgroups would be a very desirable feature, as nobody wants to do this job. Automatic archiving of the data would also be desirable.

Todays' ETH web presence contains a great deal of information about people, devices and opportunities at ETH Zurich. The public ETH World portal should not only lead to currently available information, but should also present to the global public the various opportunities offered by the physical and virtual campus. Large ETH projects should be easily visible via the ETH World portal.

Public Information

The quick search for data and the management of knowledge among ETH people must be improved. Administration in general has to be simplified and supported by ETH World such that people save at least 25 % of the time they currently use for administration.

Data bases and internal information

The ETH library projects and digital library services should be integrated into ETH World. The goal is to provide all kinds of digital primary information to the ETH-community; digitized diploma theses and dissertations, electronic journals, digitized articles from journals, digitized pictures, maps and manuscripts. All this is working already or is on the way. New services are also being considered: electronically providing all the necessary information for a lecture or seminar, installing a preprint server and so on.

ETH World must provide access to the research database of ETH which contains all current research projects. Archived projects must be acessible as well.

The life span of various classes of information has not yet been defined. Time based data warehousing has to be considered. A time based data management system needs to be developed.

Electronic reservation systems will improve the usage of lecture halls and other rooms. Expensive scientific devices and infrastructure must be well managed by reservation systems in order to allow an effective use of resources with a minimum of administrative effort.

Resource-management

Interactive roomware should be a ubiquitous part of the physical infrastructure of ETH World, so that it becomes a natural part of everyone's day-to-day work.

Invitation to tender

The web office of corporate communications will be involved in the outset in ETH World and its main portal. The present web content has to be integrated into ETH World; the current structure needs revision.

Todays
Homepage

TECHNOLOGY

The technical backbone is not part of the task. Nevertheless, the overall concept should be feasible and achievable in hardware and software terms within a reasonable time. Integration of network and security aspects should be as straightforward as possible. Entries to the ETH World competition must demonstrate a solid, functional underlying plan, not merely an attractive surface.

An aspect of this would be, for example, the taking into account of different data-transfer speeds; whereas transfers within the ETH can be expected to keep pace with the highest standards, this cannot be expected in communication with remote partners.

PHYSICAL PRESENCE

ETH World will alter the public image of the ETH Zurich as a whole in many respects, and the project provides an opportunity for a further positive development of the ETH presence. To this end, proposals are to be submitted that both anchor the ETH World project in the physical world and that can enhance the overall ETH identity. These measures are to be developed in close connection with the design of the ETH virtual presence.

What is expected is not a universal overall concept for the ETH, but proposals for particular measures, whose probability of implementation will be proportional to their meaningful content. Design elements such as the ETH logo or the orientation design of the main building may be regarded as appropriate starting points. However, farther-reaching proposals for a comprehensive corporate identity concept may also be submitted. Proposals might examine physical changes, such as the introduction of intelligent membership cards or the construction of public computer terminals, information consoles and other meeting points that mark the interface between the real and the virtual world and at the same time serve to physically map virtual meeting points. These might function as sites for both accidental, informal contacts and official gatherings. Such a site might even become a sort of „information watering hole", a meeting point existing in the physical as well as the virtual space.

One aspect which might be considered in the design is the fact that many devices such as printers and notebook computers will rely ever more on wireless data transmission. People will have easy access to their e-mail from anywhere in Zurich and, more generally, from all over the world.

Another design element might be a concept for events linking the virtual to the real world.

FUNDING

The ETH World is regarded within the ETH as a premier project. Sufficient funding is thus secured. Nevertheless, the proposals presented must be achievable and feasible within a reasonable budget.

OUTLOOK

ETH World will be the place where students registered at the ETH will meet with researchers and academic teachers from all over the world. In the very near future, one will participate in ongoing experiments and study programs independently of time and place via the Internet or by means of other multimedia forms. There will be the option to join on-line students and researchers in Tokyo or Boston in order to form work groups, or to get acquainted with the latest advances in molecular chemistry by studying 3-D models at a remote terminal. In the near future, ETH World will be the virtual university campus where very sophisticated offers in education, leading research institutions and cutting-edge services can be accessed. ETH World in a first phase will be fully commisioned and implemented at the latest by 2005 when the ETH Zurich will celebrate its 150th anniversary.

Thereafter, ETH World, apart from being updated continually, will be subject to ongoing creative development and critical change. In addition, ETH World will become an instrument in itself for the investigation of changes on various levels as well as of modes of communication in many respects.

Mainbuilding of the ETH Zurich at Rämistrasse

PROCEDURE

PARTIES OF THE PROCEDURE

ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Sponsor

represented by

Prof. Dr. Gerhard Schmitt
Vice President for Planning and Logistics
ETH Zentrum
CH-8093 Zurich
Switzerland

http://www.ethz.ch/

[phase **eins]**.
achatzi hossbach & co.

Co-ordination

Cuxhavener Straße 12-13
10555 Berlin
Germany

fn +49 – (0)30 - 31 5931-0
fx +49 – (0)30 - 31 21 000

office@phase1.de
http://www.phase1.de/

The invitation to participate is extended to design teams world-wide. The complexity and the innovative character of the design task call for a multidisciplinary composition of the teams. For admission details, see page 17.

Participants

The competition will be held in two phases. Admission to the first phase is unrestricted, while participation in the second phase is limited to a minimum of seven teams picked by the jury on the merits of their entries to the first phase.

The jurors have the task to admit entrants to the competition, to evaluate the competition entries, to select the participants best fulfilling the requirements of the competition by awarding prizes and purchases and to give the sponsor recommendations for processing the task further. (par. 51 VoeB)

<div align="right">Jurors</div>

The chairperson of the jury is appointed from amongst the jurors themselves.

<div align="right">

Prof. Richard Ernst
Chemist, Nobel Prize Winner, ETH Zurich

Dr. Josef Estermann
Lord Mayor Zurich

Prof. Kurt W. Forster
Architecture historian, Director Canadian Architecture Center, Montréal

Lic. iur. Brigitta M. Gadient
Member of Parliament, Chur

May Liem
Multimedia Content Manager, Amsterdam

Dipl. Ing. ETH Ulrich Pistor
Member of the board, Schindler Management AG, Ebikon/Luzern

Prof. Andreas Reuter
Director European Multimedia Laboratory GmbH, Heidelberg

Prof. Gerhard Schmitt
Vice President for Planning and Logistics ETH Zurich

Gerfried Stocker
Multimedia Artist, Director Ars Electronica Center, Linz

Christoph Vitali
Director, Haus der Kunst Munich

</div>

Invitation to tender

The preliminary examination will be implemented by

<div align="right">Preliminary
examination</div>

[phase **eins**].

Hans-Peter Achatzi
Benjamin Hossbach

in co-operation with representatives of the sponsor and experts as required.

Experts are renown specialists in their field. They are consulting the sponsor during the preparation of the competition as well as the preliminary examination and the jury during their meetings.

<div align="right">Experts</div>

Prof. Marc Angélil
Architect, Zurich

Prof. Tanja Diezmann
Hochschule Anhalt (FH), Institute for Interface Design
Agency for Interface Design pReview, Berlin

Dr. Andreas Dudler
Director of Computing Services, ETH Zurich

Dr. Hans Hänni
Physicist, Project Leader Network for Educational Technology, ETH Zurich

Dr. Christof Hanser
Consultant of Vice President for Planning and Logistics, ETH Zurich

Rolf Probala
Head of Corporate Communications, ETH Zurich

Prof. Fritz N. Rösel
Universitätsrechenzentrum, University of Basel

Dr. Hanspeter Scherbel
Department of Mathematics, ETH Zurich

Dr. Can Türker
Department of Computer Sciences, ETH Zurich

<div align="right">Guests</div>

Prof. Olaf Kübler
President ETH Zurich

Prof. Konrad Osterwalder
Rector ETH Zurich

Prof. Albert Waldvogel
Vice President Research and Business Relations

CONDITIONS OF THE PROCEDURE

The present call for proposals sets forth the conditions of competition. They shall be governed by the provisions of the Swiss Federal Law regarding government procurement (BoeB), SR 172,056.1 and the appurtenant regulation regarding government procurement (VoeB) SR 172,056.11, especially Art. 40-57 VoeB. Subsidiarily, the rules for architecture and engineering competition adopted by the Swiss Federation of Architects and Engineers (SIA Code 142) shall be applicable.

General prerequisites

The competition is international; the language is English. The competition consists of an open two-stage project competition (concept competition) within the meaning of Art. 42 par. 1 phrase a. VoeB.

Type of Competition

There shall be no limit to the participation. Individuals or legal entities, or work groups consisting of individuals and/or legal entities may participate.

Eligibility

In the author declaration (s. schedule), the work groups shall designate an authorized representative and his/her address as well as the names and professions of all members of the work groups and their cooperation partners and consultants. The statements in the submitted author declaration shall be binding.

In view of the competition requirements, it is recommended to ensure the collaboration of architects, communication scientists and specialists in new media. In addition, to involve (in alphabetical order) artists, computer scientists, designers, educationalists, film producers, IT specialists, marketing experts, online designers, product designers, scientists, sociologists, teachers, etc. should be envisaged.

The competition proposals shall be submitted anonymously. The adjudicator warrants the anonymity until the price jury has evaluated and ranked the competition proposals and awarded the prices. Competitors in breach of this anonymity obligation shall be excluded from the competition (Art. 48 VoeB).

Anonymity

Before evaluating the competition proposals, the adjudicator shall have them reviewed to determine whether they address the program requirements. Here, the focus lies on whether the concept allows to achieve the central goals and criterias listed in the first chapter. The results of the preliminary examination shall be published in a report.

Preliminary examination

Fundamentally, all member of the price jury must be present at jury meetings. Quorum is achieved when at least seven jury members are present.

Quorum of the Jury

Every competitor in the second stage of the competition (at least seven) whose project has been selected shall receive a fixed compensation of CHF 20,000 (plus VAT, if the competitor is subject to VAT in Switzerland). After prior consultation, the foreign competitors shall receive reimbursement of their travel expenses for two persons to the colloquium of competitors. Otherwise, the compensation of CHF 20,000 shall cover all expenses incurred by the competitors.

Prices, Purchases and Compensations

Invitation to tender

The prices, compensations and purchases shall amount to CHF 230,000 in total.

The following prices shall be awarded:

- 1. Price: CHF   30,000
- 2. Price: CHF   20,000
- 3. Price: CHF   14,000
- 4. Price: CHF   9,000

Purchases may amount to 20% of the total price at the most. Within the envisaged total price, the price jury may anonymously vote to modify number and amount of the prices.

Should the competitor be subject to VAT in Switzerland, VAT shall be reimbursed in addition to the price money and purchase price.

The competitors shall retain full copyright of all their submissions. The submitted documents of the competition proposals selected for price and purchase shall become the property of the adjudicator (Art. 54 VoeB). The competitor agrees that the submitted proposal shall be deemed an offer to conclude an agreement for further implementation of the project which grants all copyright licenses for use to the adjudicator.	Copyright and Ownership
It is intended that the winner of the competition shall be further commissioned to develop the concept up to the amount of CHF 1,000,000. In this case, the work performed in the course of the competition and compensated by the price shall not be paid once more if the concept in its essential components serves as the unchanged basis for the elaboration.	Claims Arising from the Competition
The adjudicator shall notice in writing all competitors of the price jury's decision and organize appropriate publication in the press. Upon publication of the decision, it shall exhibit publicly the competition proposals. In addition, it is intended to publish the results of the competition in a book. The submissions not selected for price or purchase may be collected within two weeks after the end of the exhibition. Otherwise, they shall be returned free of charge to the addressee.	Publication
By submitting their submissions or otherwise participating in the competition, each competitor, jury member, expert, pre-examinator and guest agree to be bound by the present conditions of competition.	Declaration of Agreement
Complaints against the adjudicator's decrees may be lodged with the Federal Appeal Commission, Avenue Tissot 8, 1006 Lausanne ((Art. 27 BoeB). Complaints must be lodged within 20 days of service of the decree (Art. 30 BoeB).	Complaints

COMPETITION MATERIALS FIRST PHASE

The materials include:

- The "Invitation to tender" brochure and attachments
(for the participants as download resp. file on CD-ROM)

- Minutes of the "Virtual Colloquium"

- One "Declaration of Authorship" form (Appendix)

COMPETITION MATERIALS SECOND PHASE

In addition to the materials for the first phase, the materials for the second phase include:

- The "Invitation to tender" brochure in printed form

- A supplement to the invitation to tender, decided upon in the first meeting of the jury

- Minutes of the Inquiry Colloquium

- 6 brochures about the ETH Zurich:
  - „Annual Report 1999"
  - "Geschäftsbericht 1999, Rat der Eidgenössischen Technischen Hochschulen, ETH Rat"
  - „ETH Zurich – The facts"
  - „Studying at ETH Zurich"
  - „Focus Research"
  - „Die 3. Ausbauetappe Hönggerberg"

- A copy of the brochure "Die Universität von morgen – Visionen, Fakten, Einschätzungen" von Charles Kleiber, 1999, alternatively in the german, french or italian language

- Overview plan about the structure of today's web-presence of the ETH Zurich

- Structural plan of the backbone-network ETH Zurich

Invitation to tender

COMPETITION REQUIREMENTS

By signing the "Declaration of Authorship" form, the participants confirm that they are the authors of their entries.

Declaration of Authorship

COMPETITION REQUIREMENTS FIRST PHASE

1. ETH World virtual space (plan # 1)

a. Two sheets size A3 horizontal (29,7 x 42,0 cm) to represent the design concept of the virtual campus.

b. A digital video file has to be submitted following these guidelines:

  • Production Format: Apple Quicktime (min. V3.0), cross-platform (Windows, Apple compatible)

  • File Type: "QuickTime Movie" linear (Apple File Type: MooV, Windows File Extension: .mov or .qt)

  • NO: QT-VR, QT-3D etc.

  • Video Screen Size: max. 800x600

  • Run Length: max. 120 seconds

  • Audio: max. 2 track, 16bit, 44.1kHz

  • Storage Medium: CD-ROM (CD-R, CD-RW), ISO 9660 (ISO-Level 2)

The contents depend on the entry itself.

2. ETH World physical space (plan # 2)

One sheet size A3 horizontal (29,7 x 42,0 cm) to represent concepts for the physical space (e. g. symbols, design, colour, events), reg. page 12.

3. Explanatory text

Two sheets size A4 vertical (21,0 x 29,7 cm) for a general description of the profile ("Leitbild"), concept and technical details in text.

4. Plan data

For enhanced quality in the preliminary report and the purpose of documentation, the plan files, stored in QXP, PDF or DXF format on CD-ROM, ZIP or JAZ cartridge, shall be enclosed.

In addition, in the case of a large number of participants the plans #1 and # 2 are required for computer-controlled large-screen colour projection to the meeting of the jury.

5. Declaration of Authorship

The declaration of Authorship form (see Appendix) should be completely filled out, signed and sealed in a non-transparent envelope. The envelope may only be labeled "Declaration of Authorship" along with the authors entry number.

Plans # 1 and # 2 are to be submitted as one set of sturdy, unfolded paper sheets (original blueprints) plus one set of copies on ordinary paper (approx. 90 g/m²), for preliminary examination. A display area of maximum size 1.00 m by 0.70 m (W x H) will be available for the presentation of every entry. Entries submitted on boards (cardboard, capaplex, etc.) should be provided with suspension rings.

Parts of entries not relevant to the competition conditions or violating conditions imposed by the sponsor will be covered up. The jury reserves the right to judge on the admission of such entries.

All submitted documents and materials are to be labelled in the upper right-hand corner with an Arabic, six-digit entry number, created by the authors themselves. This entry number should be 1 cm in height and 6 cm in width.

<div align="right">

Organization and
labelling of the
first phase entries

</div>

COMPETITION REQUIREMENTS SECOND PHASE

1. ETH World virtual space (plan # 1)

a. Four sheets size A1 vertical (118,9 x 84,1 cm) to represent the design and structure of the virtual campus.

b. Presentations on CD-ROM must be suitable for display with a recent web browser (both Netscape Communicator 4.5 or later and Microsoft Internet Explorer 5.0 or later). The presentation must be started by double-clicking on the INDEX.HTM file on the ISO 9660 format CD-ROM. Once started, the presentation must be controlled exclusively by means of the net browser. On the CD-ROM, there should be a README.TXT text file providing instructions for running the presentation. This file's content should also be provided as hard copy, and, as an option, printed instructions may be enclosed. These should not exceed ten HTML pages. As an alternative, the competition entry may be submitted in the form of an unbranched video film with a running time of max. 240 seconds. See Quicktime definition from the first phase.

The contents depend on the entry itself.

2. ETH World physical space (plan # 2)

Up to four sheets size A1 vertical (118,9 x 84,1 cm) to represent a detailed concept for the physical space (e. g. symbols, design, colour, events), reg. page 12.

3. Explanatory text

General description of profile ("Leitbild"), design concept, structure and strategy for ETH World. Coherent, qualitative ideas to achieve this goal are welcomed. This text should have a length not more than two A4 pages and be separate from the sheets showing the concept.

4. Sheet reductions

For preliminary examination, plans # 1 and # 2 are to be provided at the reduced scale of 50 per cent on A 3 sheets (29.7 cm x 42.0 cm). These reduced-scale plans corresponding, as for content and design, to the originals. For enhanced quality in the preliminary report, the plan files, stored in QXP, PDF or DXF format on CD-ROM, ZIP or JAZ cartridge, shall be enclosed.

5. One complete set of examination plans

Another set of plans, identical in content to the originals, is required for preliminary examination. For this set, black print on ordinary white paper will suffice.

6. A list of submitted documents

in the same order as listed in this brochure.

7. Declaration of Authorship

The declaration of Authorship form (see Appendix) should be completely filled out, signed and sealed in a non-transparent envelope. The envelope may only be labeled "Declaration of Authorship" along with the authors entry number.

Plans # 1 and # 2 are to be submitted as one set of sturdy, unfolded paper sheets (original blueprints) plus one set of copies on ordinary paper (approx. 90 g/m²), for preliminary examination. A maximum of six boards of 1.00 m by 1.50 m (W x H) will be available for the presentation of every entry. Entries submitted on boards (cardboard, capaplex, etc.) should be provided with suspension rings.

Organization and labelling of the second phase entries

Parts of entries not relevant to the competition conditions or violating conditions imposed by the sponsor will be covered up. The jury reserves the right to judge on the admission of such entries.

All submitted documents and materials are to be labelled in the upper right-hand corner with an Arabic, six-digit entry number, created by the authors themselves. This entry number should be 1 cm in height and 6 cm in width.

ORDER OF EVENTS AND DATES

The invitation documents were approved by the jury during the jury colloquium on April 6, 2000.

Jury Colloquium

The invitation to tender will be available for download from April 28, 2000 under http://www.ethworld.ch and http://www.phase1.de as a PDF file. For application to participate, please make use of the form provided under the heading "Application" at the above addresses and e-mail your application by May 8, 2000 to **[**phase **eins]**.

Application and distribution of invitation to tender

On request, a CD-ROM with the text of the invitation to tender will be posted from April 28, 2000 to the participants.

Inquiries are required to be made only in writing. They should be sent until May 8, 2000 to the co-ordinating office with the code "Competition ETH World - Inquiry":

Inquiries

[phase **eins]**.
achatzi hossbach & co.

Cuxhavener Straße 12-13
10555 Berlin

fx +49 – (0)30 - 31 21 000
e-mail office@phase1.de

Inquiries concerning the competition should be clearly marked with the page number and paragraph of the invitation brochure to which the questions are directed. All questions will be discussed with the jury and responses will be announced during the Virtual Colloquium.

The Virtual Colloquium will be held with the registered participants of the competition May 12, 2000. After registering for the competition each participant receives the password for the page on the competition homepage www.ethworld.ch where the Virtual Colloquium will be held.

Virtual Colloquium

The minutes of the Virtual Colloquium as well as the responses to inquiries are part of the competition and will be immediately placed as downloads in the competition homepage.

All entries to the first phase of the competition are to be submitted by June 23, 2000. The date indicated on the confirmation of receipt issued by the post office, courier or rail transport service or, in the case of personal delivery, on the receipt issued by the recipient will be valid as the official date of submission, irrespective of the indicated time of day. Entries received later than July 4, 2000 cannot be reviewed in the preliminary examination. Such entries will be submitted to the jury without any preliminary examination results. The jury reserves the right to accept or reject such entries.

Submission of the first phase entries

All competition entries are to be delivered free of charge to the recipient. Participants are responsible for the punctual delivery of all materials. As the stamp mark (or postmark) on the envelope may indicate a later date, participants are recommended, in order to be able to certify the date of submission, to save the postal receipt until the conclusion of the competition.

For examination of the first phase entries, the jury will meet on July 18, 2000. After careful deliberation and extensive discussion, the jurors will select a minimum of seven entries for further development during the second phase.

First phase meeting of the jury

The materials for the second phase of the competition will be posted to the participants on August 3, 2000. In addition, the entries of all the participants in the first phase will be documented on the competition's homepage. A password for access to restricted information will be issued to second phase participants at the time of distribution of second phase materials.

Distribution of second phase materials

Second phase participants are invited to attend a colloquium held in Zurich on August 22, 2000. Venue and scheduled time of day will be indicated in the invitation to participate in the second phase of the competition.

Inquiry Colloquium

The minutes of the participants' colloquium are an integral part of the invitation to tender and will be posted to all the second phase participants without delay.

All entries to the second phase of the competition are to be submitted by October 2, 2000. All other stipulations pertaining to the first phase of the competition are equally valid for the second phase. All participants to the second phase are recommended to submit their entries by courier service.

Submission of the second phase entries

Entries received later than October 23, 2000 cannot be reviewed in the preliminary examination. Such entries will be submitted to the jury without any preliminary examination results. The jury reserves the right to accept or reject such entries.

For examination of the second phase entries, the jury will meet on November 8, 2000. After careful deliberation and extensive discussion, the jurors will eventually formulate recommendations for the further development of the entries.

Second phase meeting of the jury

The criteria for assessment refer to:

Criteria

1. The degree to which the given main task and goals are fulfilled
   (v. page 3-5),

2. The consideration of technical and financial feasibility, including:

   • The facilitation of connections between physical and virtual structures,

   • the creation of a multifunctional, sustainable and open structure that can be continually adapted to the latest technological developments

3. The proposal fulfils the formal requirements.

The selection decided upon at the jury's first phase meeting as well as the outcome of the competition procedure will be communicated to the participants immediately after each decision has been arrived at. In addition, press releases on the competition results will be issued after the conclusion of the procedure.

Announcement of competition results

Invitation to tender

After the end of the competition, the entries to both phases will be exhibited publicly in Zurich. The exhibition venue will be indicated to the participants and the general public in due course.

Exhibition of entries

List of dates

Jury colloquium	April 6, 2000
Distribution First Phase	April 28, 2000
Application Deadline	May 8, 2000
Virtual Colloquium	May 12, 2000
Submission First Phase	June 23, 2000
First Phase Meeting of the Jury	July 18, 2000
Distribution Second Phase	August 3, 2000
Inquiry Colloquium	August 22, 2000
Submission Second Phase	October 2, 2000
Second Phase Meeting of the Jury	November 8, 2000
Exhibition	November 2000

ETH Buildings in the center of ETH

http://stadt-zuerich.ch

SITUATION AND PLANNING GUIDELINES

ETH ZURICH

The Swiss Federal Institute of Technology (ETH) is a world-renown academic institution. Apart from Lausanne's Swiss Federal Institute of Technology, it is the only Swiss university run at the national level. Its 17 departments, mostly representing technology or science, comprise numerous institutes that excel through the high standards of their research achievements and the quality of the education and services provided by them. Situated in urban Zurich, Switzerland's foremost business centre and most populous city, with its two sites, ETH Centre and ETH Hönggerberg, the ETH Zurich provides its 18,000 members from Switzerland and many other countries with excellent working conditions and a sophisticated infrastructure. Thus, the ETH forms a highly complex organism that lives in a complex environment. The ETH's self-portrait is to be found under

http://www.ethz.ch/overview/profile_ge.html

Background

The ETH Zurich can look back on a long tradition. It was founded in 1854 by the Swiss Confederation as a polytechnic, and in 1855 was opened as the Confederate Polytechnic School. Originally planned as a national university, from the beginning the ETH Zurich took pride in its department of humanities, social sciences and political science. The ETH's founding marks the beginning of Switzerland's rapid development into a country at the forefront of science and technology. In 1864, the ETH inaugurated its main building which dominated Zurich with its "allegoric elevation" above the city of that time. Up to this day the main building in the immediate neighbourhood of the University of Zurich, forms the very heart of the ETH. In 1911, the polytechnic was eventually given its present name of Eidgenössische Technische Hochschule Zurich (Swiss Federal Institute of Technology). But the Swiss still refer to it as the "Poly", an expression of both the attachment to the ETH felt by many and the pride they take in it.

History

The city of Zurich is located at the centre of Europe on the shores of Lake Zurich and just north of the Alps. Zurich enjoys a world wide reputation as a centre of banking and culture, but also especially of education. It has a population of 350.000 with a strong international component, given that 28 per cent of its inhabitants are of non-Swiss origin.

http://stadt-zuerich.ch
http://www.kanton.zh.ch
www.zuerich.ch
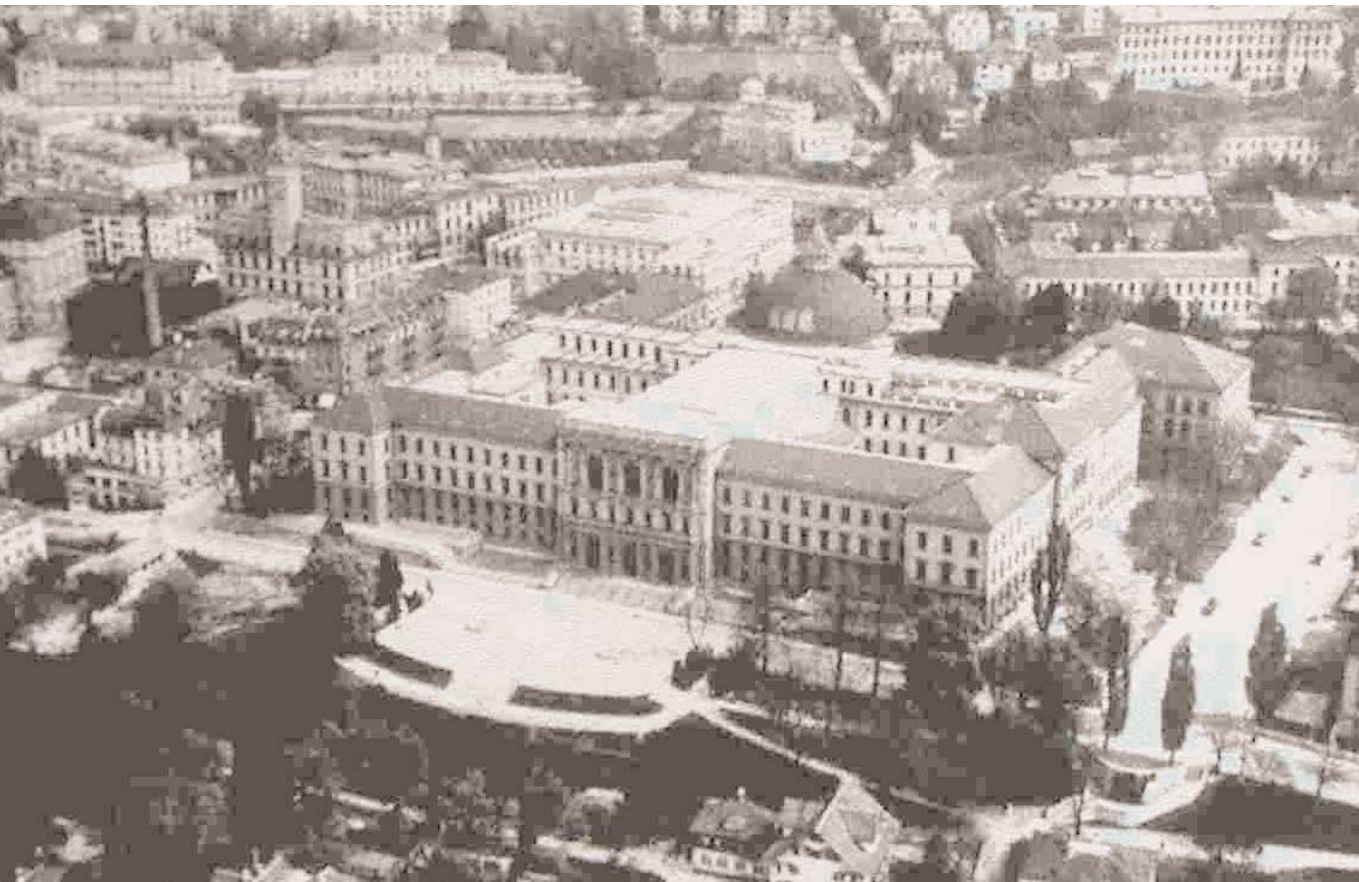
Zurich

Mainbuilding ETH Zurich 1903
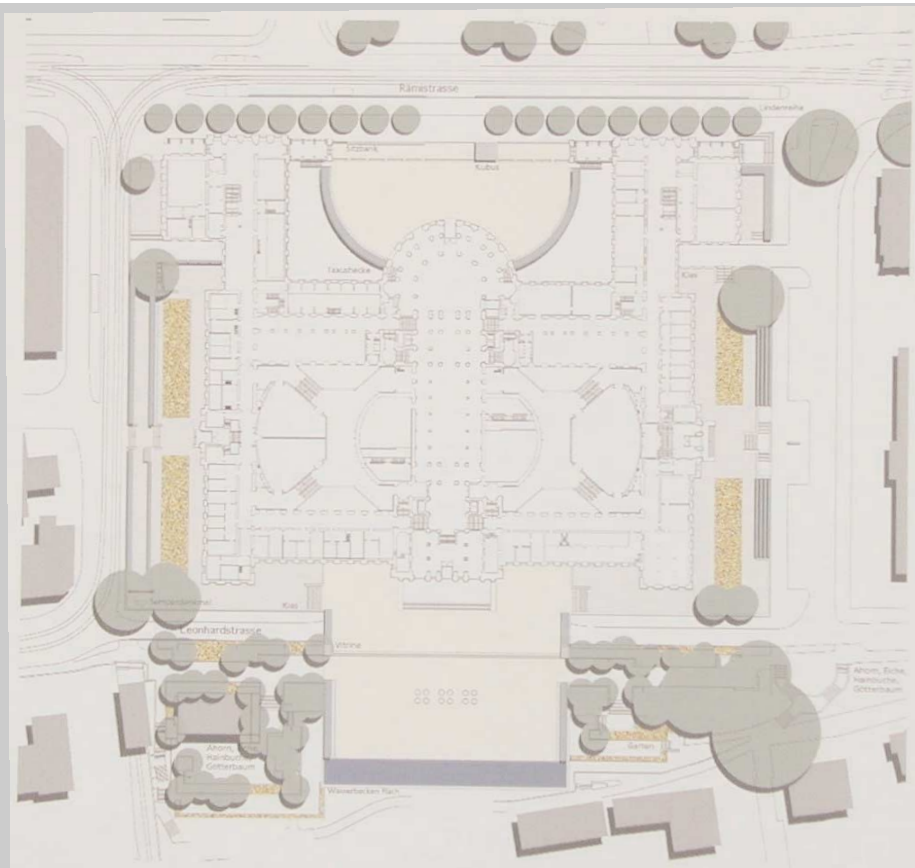
Areaplan Mainbuilding ETH Zurich

The ETH community comprises some 350 professors (both male and female), of whom approximately half are non-Swiss specialists, as well as 12.000 students. They are supported by a scientific and administrative staff of some 5,000 employees. The total number of ETH World's "netizens" predicted for 2008, including ETH alumni, is 40,000.

ETH Community

http://www.imc.ethz.ch/

A sign of the ETH's excellence and one reason why people feel so attached to the university are the numerous honours and prizes bestowed on members of the ETH community or on ETH projects. Thus, twenty Nobel laureates, can be cited in more or less close connection with the ETH. Among them are Wilhelm Konrad Röntgen (1901), Albert Einstein (1921), Otto Stern (1943) and, most recently, Richard Ernst (1991) who is member of the jury of this competition.

The ETH's Stars

http://www.ethz.ch/overview/nobelprize/nobelprize_ge.html

The ETH Zurich is made up of the university's top management (Schulleitung), the academic assembly (Hochschulversammlung), the central bodies (zentrale Organe) and the different departments.

Organizational structure

The university's top management team is formed by the President, Professor Olaf Kübler, the Rector, Professor Konrad Osterwalder, the Vice President for Research and Business contacts, Professor Albert Waldvogel, and the Vice President for Planning and Logistics, Professor Gerhard Schmitt.

The President is responsible for the management of the university on the legal and political levels and he reports to the ETH Council. He chairs the meetings of the top management team and co-ordinates its activities. He is elected by the swiss government (Bundesrat).

The candidate for the post of the Rector is nominated and elected by the university's professors from amongst them. The Rector is in charge of academic teaching, he represents the university in academic matters and promotes collaboration with other universities. In addition, the Rector acts as the President's deputy.

The 17 departments are each headed by a Dean. The deans together form the Deans' Conference which is chaired by the President. The departments are the university's units of research and education. They are made up of institutes or laboratories, professorial chairs and departmental institutions. Each department is managed by a body composed of representatives from the four different groups of the university (professors, assistant professors, employees and students).

In addition to the departments, the ETH Zurich comprises also the Collegium Helveticum and the Centro Svizzero di Calcolo Scientifico (Swiss Centre of Scientific Computation), the latter being located in Manno, close to Lugano, as important constituent bodies.

The university's central bodies are the administrative units (rectorate, personnel, finance and legal divisions, building management division, etc.), the central scientific facilities (libraries, computing services, centre for teaching and learning, center for continuing education, etc.) and the staff posts of the four top managers.

This structure is paralleled by various bodies that represent the ETH's different interest groups. Professors are represented by the Academic Teachers' Committee, assistant professors by the Association of ETHZ Assistant Professors, employees by the Staff Committee and students by the ETH Students' Association. In addition, there are 82

ETH

| ETH at a Glance |
| Education |
| Research |
| Services |
| In-house Page |
| Home |

Search Help

Deutsch

Orientation Support for ETH Zurich

Overview maps

- City map of Zurich (Map inclusive Schlieren)
- ETH Center (Map with all building codes)
- Main building
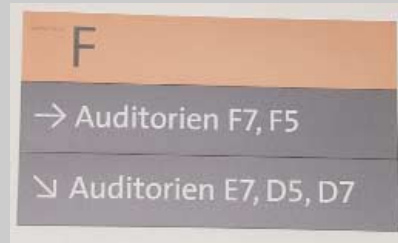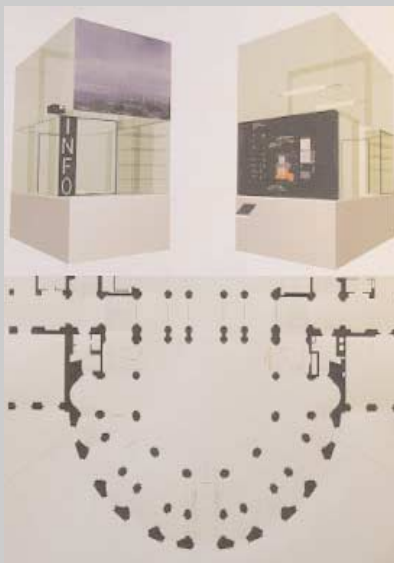- ETH Hönggerberg (Map with all building codes)
- ETH Schlieren

  Download of Maps in different graphics formats (IKA)

How to get to ETH Zurich?

- Public transportations
- Timetables of the public transportations of Zurich (VBZ Züri-Linie)
- Timetables of the Swiss Federal Railway (SBB)

Buildings – Orientation System ETHZ

http://www.ethz.ch/search/orientation_en.html

F 49

Bereich Planung und Logistik

F 49	Brunhilde Riederich (Anmeldung)
F 50.3	Prof. Gerhard Schmitt
F 50.1	Hildegard Kehl
	Katharina Hagenauer
F 48.3	Viera Kasa
F 48.2	Marcel Herbst
F 48.1	Dr. Andreas U. Gehrig
F 46	Dr. Marcel Schmucki
F 45	Dr. Rudolf Kühne

F
→ Auditorien F7, F5
↘ Auditorien E7, D5, D7

Images of the interior design concept by Flickert and Knapkiewicz (floor, staircase, info/coffee booth, signs)

other groupings, each with a homepage of its own, a list of which can be found on the ETH homepage.

http://www.rektorat.ethz.ch/frame/rektoratssekretaer/sekr_dozentenkomm.html
www.ethz.ch/overview/overview_ge.html
http://www.ethz.ch/overview/structure_ge.html
http://www.aoa.ethz.ch/whoiswho/

At the ETH Zurich, education and research are organized in 17 departments comprising 80 institutes, as can be seen from the chart on the opposite page.

Departments

http://www.imc.ethz.ch/

The ETH's current physical presence is formed by 170 different pieces of property spread all over the city and providing a floor space of some 350.000 square meters, most of which is concentrated on the two main sites at Zurich's centre and on the Hönggerberg which is located at a distance of some 8 km north-east from the center. Another major site is located in the borough of Schlieren which is at a distance of approx. 4 km to the west of the Hönggerberg.

Buildings

For further information, including an overview of all buildings, see:
www.ethz.ch/search/orientation_ge.html#gebaeude
www.ethz.ch/search/building_by_abr.html

Floor space data for each department and institute are available under
www.planung.ethz.ch/infrastruktur/.

The ETH's original site is located at the city center in the immediate vicinity of the University of Zurich. The prominent core of the university quarter is formed by the ETH's main building, the prestigious 1864 creation of Gottfried Semper. This is where many of the ETH's central facilities are located, such as the university management's offices and various administrative sections, but there is also an extensive range of rooms for research and teaching. In addition, the main entrance and the central lobby are important places of identification for the whole of ETH, as they are also centres of orientation within the building.

Center

The main building's cupola houses the "Visdome", an interdisciplinary multimedia lab and presentation hall used by numerous ETH institutes and closely connected to the subject of new media at the ETH. Adjacent to it, a cafeteria provides a spectacular view from its roof garden over the city.

In 1995/96, a design competition was organized under the title "Physical Appearance Mainbuilding '96" whose objective was to find solutions for upgrading the main building's material image. The row of university buildings along Raemistrasse is meant to be perceived as a unified space which, as a place of culture, opens itself to the city. The prize-winning design by the architects Fickert and Knapkiewicz on the one hand is concerned with the structuring and shaping of the halls, corridors and quadrangles. On the other hand, it proposes an information system comprising the labelling of the different rooms, but also the setting up of orientation panels at the building's four entrances. The concept's greatest impact is to be seen in the colouring of wall and floor surfaces of the halls and corridors. The walls are being given a uniform smooth plastering and white painting, while the hall floors are being covered with orange-coloured material.
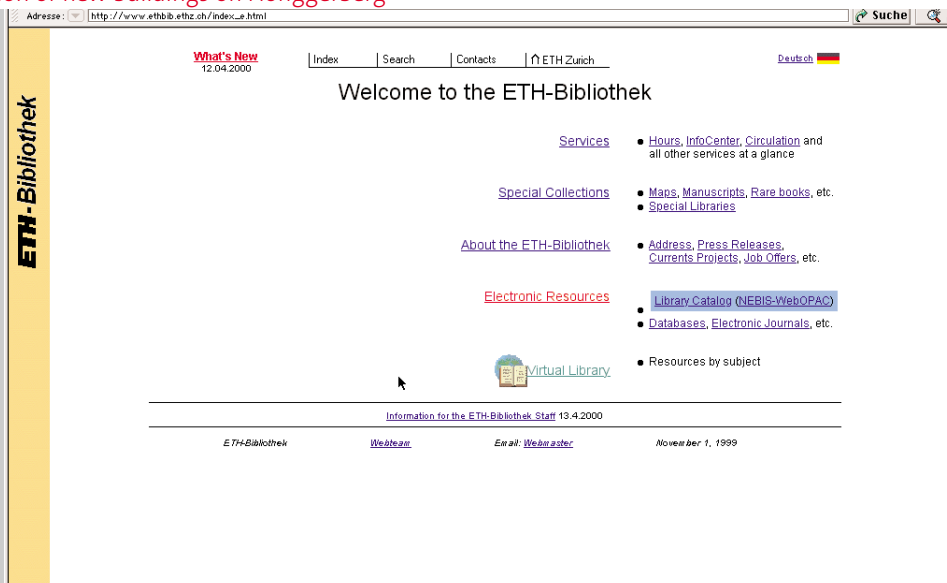
www.planung.ethz.ch/hauptgebaeude/projekt/projekt.html
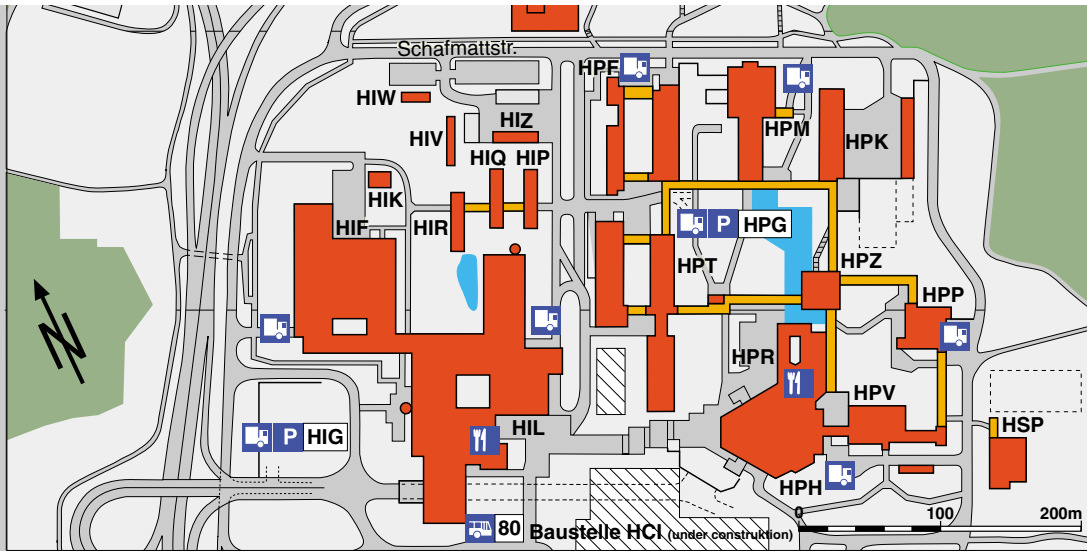
Siteplan Hönggerberg

Simulation of new buildings on Hönggerberg

http://www.ethbib.ethz.ch/

Hönggerberg

To alleviate the dire need for space, the Swiss Federal Parliament approved the planning of a modern ETH campus on the Hönggerberg in 1959. In 1963, the department of physics moved into the buildings erected during the first phase of construction, soon followed by the department of biology. In a second phase, from 1971 to 1976, the buildings for the departments of Civil, Environmental and Geomatics Engineering were erected. The third phase of construction on the Hönggerberg was started in 1990 with a competition which was won by the Lugano-based architect Mario Campi. The department of chemistry will move into the new facilities in the immediate future as well as the department of material sciences and parts of the department of biology in 2004. With this relocation, approximately 40 per cent of all ETH students will then attend the Hönggerberg campus site.

With a center of its own, numerous lecture halls, office and laboratory buildings, several libraries, exhibition galleries, restaurants, cafeterias, model workshops, a sports facility and a day nursery, the Hönggerberg site is largely autonomous. Many ETH members use the underground car park as an access to the complex, while others approach it from the bus station located on the periphery. Other places of identification and orientation are the main public plaza, the service building in the center, the duck pond, the power station in the north, and the meadows in the south. The public plaza is currently being completed from Mario Campi and interconnecting all the main entrances of the three building complexes. Adjacent to this plaza are a new bookstore, a café and exhibition galleries, which serve as entrance foyers to the new state-of-the-art auditoria housed in the complex.

Webcam of construction: http://www.planung.ethz.ch/3ABE/aktuell/livecam.html

Data bases

There are various data bases with manifold size and structure already existing at the ETH. Some of them are of general use by central administration, such as the libraries and the personnel data. Others are more specific and decentral in their function and administration. An overall description is not possible at this moment.

http://www.ethbib.ethz.ch/
http://www.erdw.ethz.ch/
http://www.tma.ethz.ch
http://www.afz.ethz.ch/

Networks

To permit easier administration of the communication network as a whole, the ETH network infrastructure is subdivided into some 600 sub-networks. Thanks to this segmentation and hierarchical structure, the backbone network and the low-level distribution networks are independent from each other, so that the backbone may be restructured without affecting the lower levels. Within each campus, buildings are accessed through star-type networks from only a small number of nodes. In all, the ETH network supports about 22,000 networked computers. Beyond the computer networks, ETH also manages about 15,000 telephone connections.

The ETH's backbone network (RNETH) consists of optical fibers linking almost all ETH-owned buildings as well as several leased premises (see http://www.kom.id.ethz.ch/pdf/rneth.pdf). The Hönggerberg campus and the central campus are linked by ETH-owned optical fibers, while the Technopark and the Schlieren campus are connected to the ETH over rented lines. The types and numbers of optical fibers have been chosen to enable the support of gigabit protocols and other transmission technologies without physical modification.

Redundant links have been provided at the central campus and at the Hönggerberg campus. These links, though slower than the primary links, permit network activity to

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789

ETH Standard fonts (The Sans light / The Sans light italic and The Sans bold / The Sans bold italic

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

positive black on white background

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

negative white on black background

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

positive black on light background

ETH
Eidgenössische Technische Hochschule
Swiss Federal Institute of Technology

negative white on dark background

ETH Logo

continue even in the event of a primary link failing. This redundancy also permits work on the important primary links to be carried out without interrupting the network.

The backbone is presently being converted to gigabit ethernet, backed up by ATM-OC12 (622 Mbit/s). The backbones in most major buildings are being implemented with gigabit ethernet. The conversion will take about two years. At the same time, end-user 10Mbit/s repeater technology is being phased out in favour of 100/10Mbit/s autodetecting switch technology. Most new hosts are now being installed with fast ethernet connections, and many older hosts are being upgraded. Hosts can be directly connected via gigabit ethernet if the need arises.

Access to the wider Internet is through Switch (www.switch.ch). At present, the connections are fast ethernet, but these will be upgraded to ATM-OC12 in the near future.

For some time, planning and construction of the ETH's communication networks have been geared to the introduction of a 'Distributed Computing Environment'. This is being achieved through the adoption of appropriate cabling principles such as universal cabling of buildings providing three network connections per workplace, support of multiple protocols (chiefly TCP/IP), and provision of sufficient performance capacity.

The ETH's cabling philosophy has been adopted by the Swiss federal administration as the basis of their own directives (see http://www.kom.id.ethz.ch/ps/UCS-ETH.ps). These are presently being redrafted; the new version was expected to be ready by the end of March. The new document will be available at http://www.kom.id.ethz.ch/pdf/UCS-ETH.pdf.

For more information about the ETH network, see the following URLs (in German):

http://www.kom.id.ethz.ch/grunds_GE.html
http://www.kom.id.ethz.ch/infra_GE.html
http://www.kom.id.ethz.ch/Netzdienst_GE.html
http://www.kom.id.ethz.ch/

Corporate Design

Recently, a concept for the ETH's corporate design has been developed which is currently being implemented. In particular, it comprises stipulations for the use of the ETH logo and lettering styles.

The three letters "ETH" form a sign which is known world wide. The two sub-lines "Eidgenössische Technische Hochschule Zürich" and "Swiss Federal Institute of Technology Zurich" define the university's mission, location and importance. The logo and its sub-lines never occur separately. The logo is clearly distinct from its background. On a white background it is executed in black. In case of a light or coloured background, darker tones are used for the ETH logo. On a dark background it will appear in white. On business documents the ETH logo is always placed prominently at the top left. On brochure title pages it appears at the bottom left with its sub-lines in German and English.

Some ETH units use presentations of their own. These must complement the overall ETH image. ETH business papers may, besides the ETH logo, also carry a second logo. In addition, the Corporate Identity brochure comprises a list of things "to do or not to do" when applying the ETH logo.

There is no uniform ETH corporate colour. The ETH Zurich is characterized by the wide range of its activities. Correspondingly, its print products reflect this multi-faceted character by a variety of colours and other graphic design elements. Colours are chosen according to the printed material's content and its target group. The colour catalogue comprises the eight basic colours shown on the opposite page. For headings and body

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Pantone Blue 072 (100 % Cyan, 80 % Magenta)

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Pantone Green (90 % Cyan, 60 % Yellow)

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Pantone Violet (90 % Cyan, 90 % Magenta)

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Pantone Red 032 (100 % Magenta, 90 % Yellow))

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Pantone Orange 021 (55 % Magenta, 90 % Yellow)

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Pantone Cool Grey 8 (55 % Carbon)

The ETH colours
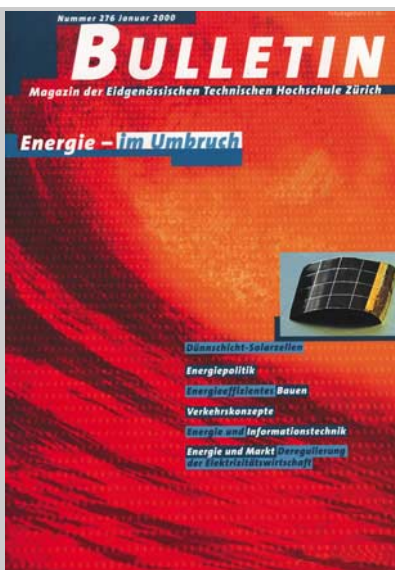
Examples for covers of ETH brochures

matter, the ETH uses two typefaces, "The Sans light" and "The Sans bold", both also in their italics varieties. In addition, "The Sans" provides a wide range of special characters.

For the selection of figures for title pages, there are directives for establishing close correspondence within the content of each document. Thus, at the educational level there is a preference for graphic subjects depicting humans and the relation to knowledge, while at the service level the artwork symbolizes the service provided in each case: a microphone for public relations work, a telephone keyboard for manuals or an electrical cable for the electrical power synopsis.

The Logo and the letterings can be downloaded from the address http://www.aoa.ethz.ch/, as can software tools for the printing of business cards, etc.

The ETH's WWW presence is depicted, in somewhat simplified form, in the chart on the opposite page. The ETH web presence is the responsibility of a web office, which will also be heavily involved in the ETH's future virtual presence.

Current presence on the World wide Web

At present, some 940,000 documents can be accessed in the domains ethz.ch, eawag.ch, empa.ch, wsl.ch and psi.ch. Some 620 servers are currently in operation, 200 of which are virtual webs implemented on the central web server.

The main ETH web servers (www.ethz.ch et al) are located in the ETH Computer Centre and are connected via fast ethernet.

http://www.weboffice.ethz.ch/

Apart from its everyday programme, the ETH Zurich organizes various social events. In addition to innumerable gatherings with more or less restricted access, congresses, exhibitions and happenings organized by the different institutes, university sections or professional bodies, some major events have attained considerable importance for the social life of the ETH as a whole.
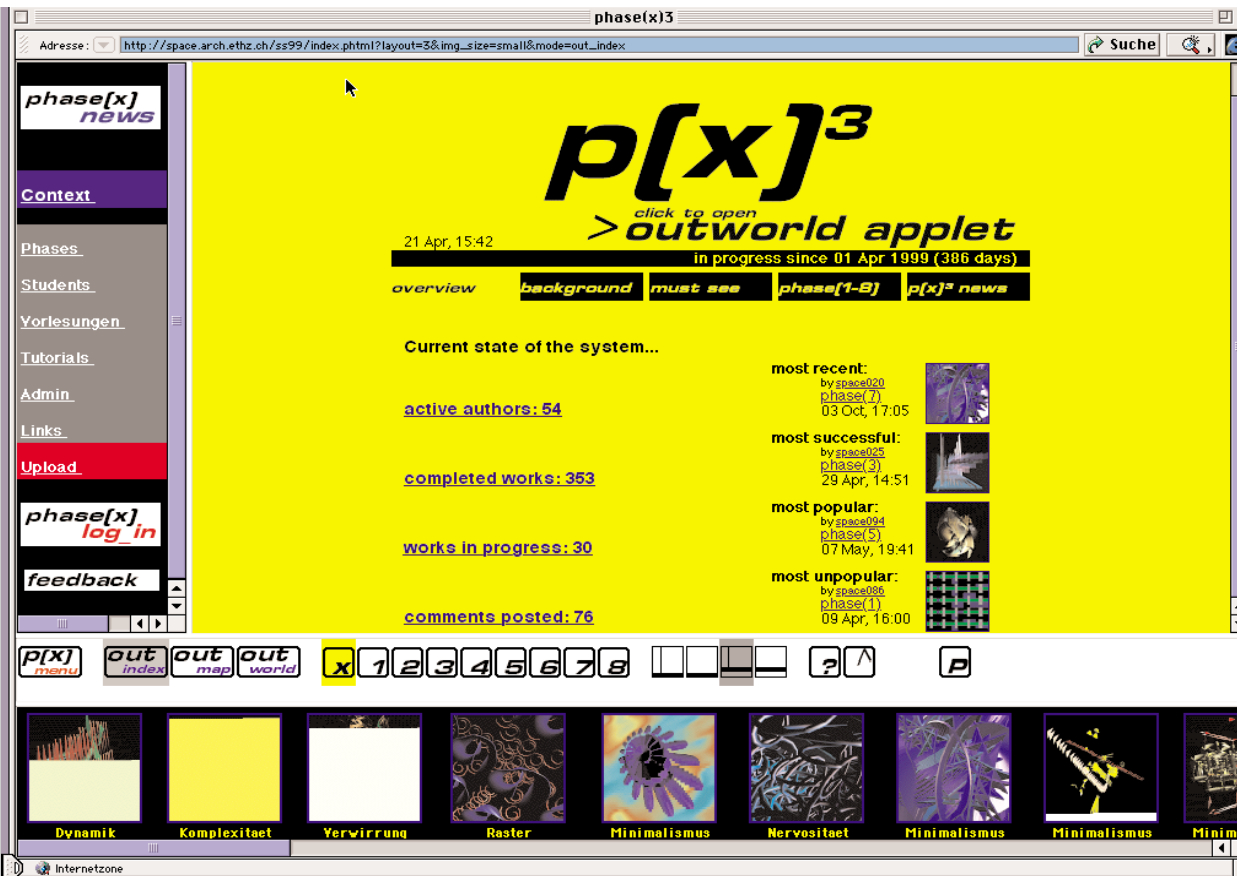
Events

http://www.verw.ethz.ch/vk/

The ETH Day is the official day of celebration of the ETH's founding. On this occasion, which i.a. is accompanied by the award of honorary doctorates, every year some 600 guests are gathered to attend a banquet.

In 1912, the first Poly ball, held under the name "Akademie", was attended by 400 people. Part of the ball's profit was handed over to less well-off students, a feature which has been upheld to the present time. Over the years, it has become Europe's biggest decorated ball. In its current form, the Poly ball was first held about 20 years ago. The event is staged annually at the end of November in the main building and the MM complex (canteen, sports halls). Some 16 halls are sumptuously decorated in correspondence with the ball's theme. The programme features music, dance, a lottery and catering of top culinary standard. Every year, the Poly ball attracts up to 10.000 guests, most of who come from academia, but also from other social groups. The ball is organized by the Committee for Student Events (KOSTA).

http://www.polyball.ethz.ch

Startseite HOME KOSTA POLYBALL DOSSIER SEARCH

Herzlich willkommen auf der Hompage von Polyball / Kosta !

Polyball

Der Polyball 2000 findet am Samstag 25. November 2000 unter dem Thema "Tanz der Sinne" statt. Alle Details finden Sie ab dem 1. Oktober auf dieser Seite.

- Einladung zum Ball 2000 anfordern
- Ticket bestellen
- Erste Infos
- Polyball 1999
- Polyball 1998
- Polyball 1997
- Polyball 1996

Kosta

KOSTA ist die Abkürzung für "Kommission zur Organisation Studentischer Anlässe". Die öffentliche Kosta-Seite ist auch direkt via http://www.kosta.ch/ erreichbar. Für Kostas, Ehemalige und sonstige Zugewandte haben zusätzlich wir eine interne Informationsseite (mit Passwort) eingerichtet..

- Kommissionsmitglieder
- Emails
- Vermietungsliste
- Töga
- Wo man uns findet

Dossier

Im Dossier finden Sie viele Hintergrund Informationen zum Polyball.

- Fotos von Polyball 1999
- Foto von alten Bällen
- Was meint die Presse?
- Geschichte

Für Fragen zum Polyball oder KOSTA erreichen Sie uns unter info@kosta.ch oder Telefon 01 / 632 77 20.

© Webmaster, 5. Februar 2000, http://www.polyball.ch/

http://polyball.ethz.ch/

---

phase(x)3

Adresse: http://space.arch.ethz.ch/ss99/index.phtml?layout=3&img_size=small&mode=out_index   Suche

phase[x] news

Context

Phases
Students
Vorlesungen
Tutorials
Admin
Links
Upload

phase[x] log_in

feedback

p[x]³
click to open
>**outworld applet**

21 Apr, 15:42
in progress since 01 Apr 1999 (386 days)

overview background must see phase[1-8] p[x]³ news

Current state of the system...

active authors: 54

completed works: 353

works in progress: 30

comments posted: 76

most recent:
by space020
phase(7)
03 Oct, 17:05

most successful:
by space025
phase(3)
29 Apr, 14:51

most popular:
by space094
phase(5)
07 May, 19:41

most unpopular:
by space086
phase(1)
09 Apr, 16:00

p[x] menu   out index   out map   out world   X 1 2 3 4 5 6 7 8   ? ^   P

Dynamik   Komplexitaet   Verwirrung   Raster   Minimalismus   Nervositaet   Minimalismus   Minimalismus   Minimal

Internetzone

http://space.arch.ethz.ch

INITIAL VIRTUAL PROJECTS AT ETH ZURICH

Apart from its presence on the World wide Web, ETH Zurich pursues various other activities in the virtual domain. In addition, this year a number of new projects are being promoted, which are meant to exemplify the opportunities provided by ETH World in an experimental environment.

Initial structures for research and teaching in the virtual space of the ETH have been developed already by NET (Network for Educational Technology), which started its activities on January 1, 1997. NET is a project within the domain of the Rector and its scope is to:

NET

- make the teaching and learning at ETH „year 2000 compatible" by:
  - identifying new technologies
  - transferring the developments into the T&L process
  - supporting teachers and students
  - assuring the quality of educational design

- co-ordinate and foster projects in the field of technology-supported teaching and learning

- support the development of components related to teaching and learning for ETH World.

In particular, NET

- maintains a Web-site (http://www.net.ethz.ch/) serving as a platform for information and communication. It contains e.g. an agenda on relevant events about educational technology, a data base of ETH-projects in the field of new educational technologies, hard- and software-information, educational technology relevant links, an archive of documents, publications and information about assemblies in the past, and more,

- moderates a mailing list (NETlist) where educational technology related news are posted and commented,

- fosters projects in the field of new educational technologies – mainly in-house but also in collaboration with other universities and higher education institutions, especially with the universities of Zurich and Basle. Techniques and methods particularly supported by NET are Web-based teaching and learning environments, multimedia authoring, streaming audio and video techniques, as well as tele-conferencing

- supports and promotes synchronous transmissions of courses, seminars, talks etc. using the ATM-based high-end interactive multi-channel audio-video transmission system TELEPOLY (which has been developed jointly by the ETH Zurich and its sister university EPF Lausanne) as well as ISDN-based, Web-based or other tele-conferencing and transmission systems

- evaluates projects using new educational technologies by gathering experience and feedback in order to improve the instructional design quality of their application

http://www.pharma.ethz.ch/dep/Portalseite/Portal/Port.htm

http://www.darmstadt.gmd.de.ambiente/

http://deix.ch/

- assesses new hardware devices (like interactive screens etc.), software tools as well as instructional design methods related to new educational technologies

- organizes and conducts courses for teaching staff about applying the new information and communication technologies, especially using the Web, in their teaching.

During the years of 1998 and 99 NET has – together with the corresponding authorities responsible for the technical equipment and infrastructure of the classrooms at ETH – planned and installed a center for media-supported teaching and learning (called "media center"), including synchronous interactive tele-teaching. The center consists of a tele-teaching auditorium (80 seats), a multimedia computer class room for courses and self-education (12 working places), a flexible studio-type multimedia classroom (40 seats) including a joint control room, a multi-purpose classroom (20 seats) and a lounge-type common room equipped with a row of laptop working places including internet-connection points.

From the tele-teaching auditorium, which is equipped with three video cameras (one for the speaker and two for the auditorium), 5 beamers and about 40 camera-directing microphones (one per two students) and an interactive white board (smartboard®) a series of courses have already been successfully exchanged i.e. with the university of Basle in the field of pharmaceutical chemistry and computer science.

http.//www.net.ethz.ch/

Virtual Education in Pharmacy

At the Department of Applied Biosciences, a team-lecture course is held within the framework of the Pharmaceutical Sciences Telepoly which, with the advent of ETH World, is to be extended to include research and ongoing education. The educational homepage of the chair of Pharmaceutical Chemistry provides a closed learning environment on the Internet and will initially only be accessible for students from the University of Basel and the ETH Zurich. It is planned to implement a learning environment in which pharmacy students from Basel and Zurich will be able to study parts of the Pharmaceutical Chemistry course individually and from whereever they wish to access the website.

http.//www.pharma.ethz.ch/dep/Portalseite/Portal/Port.htm

Vireal Laboratory

The 'Vireal Laboratory' is a project conceived by the Institute of Pharmaceutical Sciences. This lab will be furnished with intelligent roomware technology consisting of tables, seats and boards which by means of integrated electronic devices provide easy access to the Internet, to data bases and LANs. These facilities will permit the innovative linking of research and education by means of the on-line transmission of experiments, simulations and analyses on which lecture notes will be superimposed. Thus, a virtual space for research and education will be unfolded which will be characterized by a holistic component.

http.//www.darmstadt.gmd.de/ambiente/

Chemistry Contact Forum

The Chemistry Contact Forum project, housed by the Laboratory of Anorganic Chemistry, pursues a similar objective. Its main goals are the evaluation, formulation and visualization of chemistry within ETH World, enhanced visibility of chemistry vis-à-vis the general public and its increased general acceptance as well as network-based chemistry education at both secondary high school and university levels.

http://www.alumni.ethz.ch/

http://www.net.ethz.ch/

http://deix.ethz.ch/

| | Data Retrieval System |

The context-sensitive data retrieval system set up by the Institute of Information Systems will be further developed within the framework of ETH World and made available without restriction, for it is suitable for general-purpose retrieval tasks and will serve the ETH World project as a whole. Using a relevance feedback algorithm, one can retrieve even complex images or chemical graphs. This algorithm makes use of a similarity search feature which maps the degree of similarity of the two images to be compared with a number. The bigger this number, the greater the similarity of each pair of pictures.

| | Personal Intelligent Assistant |

A project from the field of technology transfer and industrial partnership is being implemented at the ZPE portal. ZPE stands for the ETH's „Zentrum für Produktentwicklung" (Centre of Product Development). The project's main objective consists in the development of a design concept and tools, such as the "Personal Intelligent Assistant", for simplifying and intensifying the exchange between the ETH and its vast business and technological environment.

| | Alumni Portal |

In addition to the communication infrastructure for research, the one for alumni is also to be enlarged substantially within the framework of ETH World. The Alumni Office and the ETH Web Office of Corporate Communications are looking into the creation of an Alumni Portal and accompanying services.
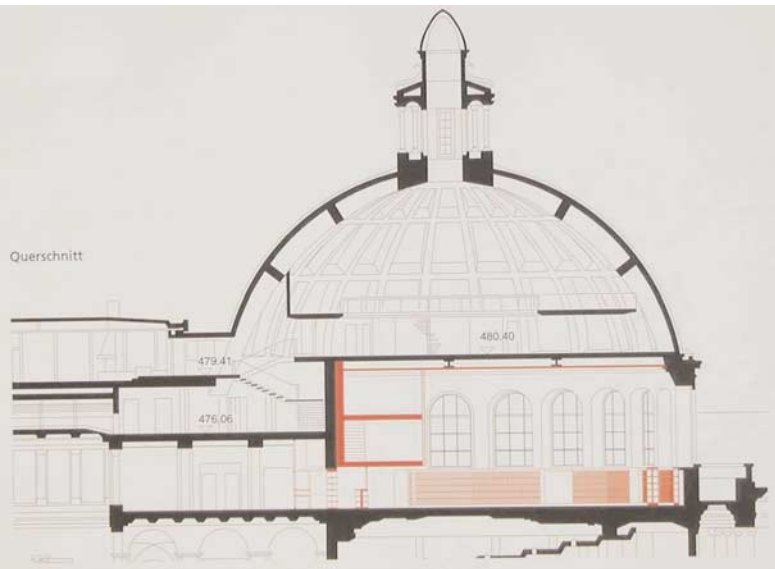
The ETH Alumni Portal will provide an unique entry point into the virtual world of the ETH Zurich for ETH Alumni. It will also be a gateway to ETH departmental, regional, national and international alumni associations and their services. The project's prime motivation is to enlarge opportunities for both alumni and university members to build and strengthen relationships with one another and to work together on a new interactive communication platform. The main focus will be on communication and networking. Services will include alumni directories, mailing lists, career support and especially virtual meeting rooms. An Alumni Personal Office will include e-mail, homepage, diary and address book. Professional and general news, shopping opportunities and lots of links will complete the special alumni service and make the ETH Alumni Portal a primary stop on the Internet.

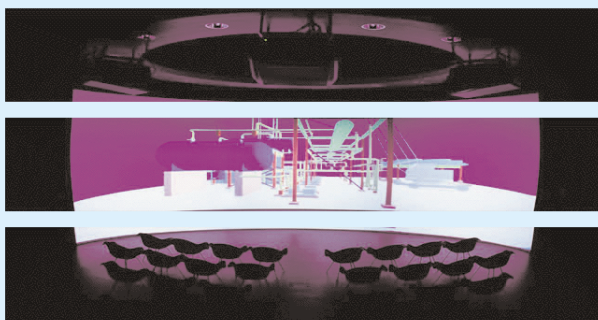http://www.alumni.ethz.ch

| | Education technologies |

One project by the Centre for product-development at the ETH will study the value of information. Despite the enormous development of the information technologies, information alone is not sufficient to enssure a competitive advantage. The project will take these aspects into account by creating an integrated learning, information and training environment. State-of-the-art multimedia technology will be used to enhance the information and learning process. The system will utilize new forms of teaching and will function as a complementary supply of lecture materials in a first step during the transitional period. A strong component of interactivity will support the use of the system with improved communication tools among students and with lecturers. The system will promote the exchange of ideas and their judgment. The complex decision making processes, which characterize product design and development, will be one important focus of the learning scenarios. The students can determine independently time and place of their studies and can make their choice among the courses, which correspond to the qualification they seek.

Further examples are given in the data bases of the ETH-NET (Network for Educational Technology.

ETH mainbulding's cupola with Visdome

http://www.visdome.ethz.ch/

http://www.edutech.ch/edutech/index_e.asp

http://www.net.ethz.ch/

Visdome is the ETH's Visualization Centre for virtual reality applications. It has been organized as a working group comprising 14 ETH chairs and is situated in the main building's cupola space. Its goals are the provision of a high-performance interdisciplinary research platform, combined with technology transfer to industry.

The Visdome is equipped with state-of-the-art software and hardware, such as high-performance computer systems from Silicon Graphics (Onyx 2), stereoscopic large-screen projection equipment (12.0 m wide and 4.0 m high cylindrical screen), haptic interface, data helmet, shutter spectacles, data glove, tracking system, sound system and video composition and editing equipment. These tools are subject to continual addition and further development.
http://www.visdome.ethz.ch

Visdome

OTHER VIRTUAL PROJECTS

Apart from ETH World, three other major university programs in the virtual domain are presently under way in Switzerland: "Swiss Virtual Campus", "EPFL en ligne" (EPF Lausanne) and "NTIC" (Council of the Swiss Federal Institutes of Technology).

However, different from ETH World, all three of them focus mainly on teaching and learning.

Outside of Switzerland, there are a number of initiatives promoting the creation of networks as well as the image enhancement of academic institutions.

The "Swiss Virtual Campus" is a programme supported and founded by the Swiss federal government. It is mainly intended to encourage the cantonal universities in their efforts to include the new educational technologies in their curricula. The Swiss Federal Institutes of Technology and the universities of applied sciences are, however, also able to participate, but their contributions have to be financed separately. The programme aims especially at fostering collective developments of Web-based courseware by groups of universities. The first call for notices of intent in November 1999 has had an enormous response. The second homepage indicated below currently lists 136 Swiss and foreign projects that have applied for support. They represent excellent examples of the opportunities provided by the New Media in the educational realm.
http://www.virtualcampus.ch
http://.virtualcampus.ch/projects/

Swiss virtual campus

The precursor of the "Swiss Virtual Campus" is the national server "edutech", supported by the Swiss Federal Office of Education and Sciences, the Swiss Academic Conference (SHK) and the University of Fribourg. It gathers information on the application of the New Information and Communication Technologies (NICT) to educational activities in the Swiss higher education domain. The edutech homepage comprises also a commented address list of interesting resources on NICT applications to the classroom and lecture hall.
http://www.edutech.ch/edutech/index_e.asp

"EPFL en ligne" is a concept developed by Lausanne's Swiss Federal Institute of Technology, EPFL. It aims at a progressive establishment of teaching and learning

EPFL en ligne

http://www.virtualcampus.ch/

http://www.epfl.ch/enligne/

http://www.ethrat.ch/sec/edu/ntic/

resources which are accessible in a flexible way, particularly from distant locations. EPFL intends to develop this concept into its second pillar in future.
http://www.epfl.ch/enligne/

NTIC is a project of the ETH Council for the promotion of the new educational technologies in academic teaching and learning. It focuses exclusively on broad-scope projects and the application of innovative pedagogic strategies. For 2000 to 2003, a total amount of 4 million Swiss francs has been budgeted for its funding.

http://www.ethrat.ch/sec/edu/ntic/

NTIC

Outside Switzerland, there are a number of initiatives promoting the creation of networks and virtual campuses. The list in alphabetical order shows various international examples for projects in education and research in the virtual world. Only a non-exhaustive selection can be given here.

International Projects

- **Institute for Technology Monterrey**   http://www.sistema.itesm.mx/uv.htm
- **Open University**   http://www.open.ac.uk/
- **Phoenix University**   http://www.uophx.edu/
- **Regents College**   http://www.regents.edu/
- **Robert Gordon University Aberdeen**   http://campus.rgu.com/
- **University of Southern Queensland**   http://www.usq.edu.au/
- **University City**   http://www.vtu.edu/
- **Virginia Tech**   http://www.vt.edu/
- **Virtual City Saarheim**   http://www.jura.uni-sb.de/FB/LS/Grupp/saarheim.htm
- **Virtual Polyclinique at University Ulm**   http://www.docs-n-drugs.de/
- **Virtual Polytechnic**   http://www.vfh.de/
- **Virtual University Baden-Württemberg**   http://www.virtuelle-hochschule.de/
- **Virtual University Oberrhein**   http://www.viror.de/
- **Virtual Doctors College**   http://viadrina.euv-frankfurt-o.de%Esw2/Doktoranden/
  of the Europe-University Viadrina
- **Virtual University Hagen**   https://vu.fernuni-hagen.de/
- **The World Virtual University**   http://www.ccon.org/theU/index.html
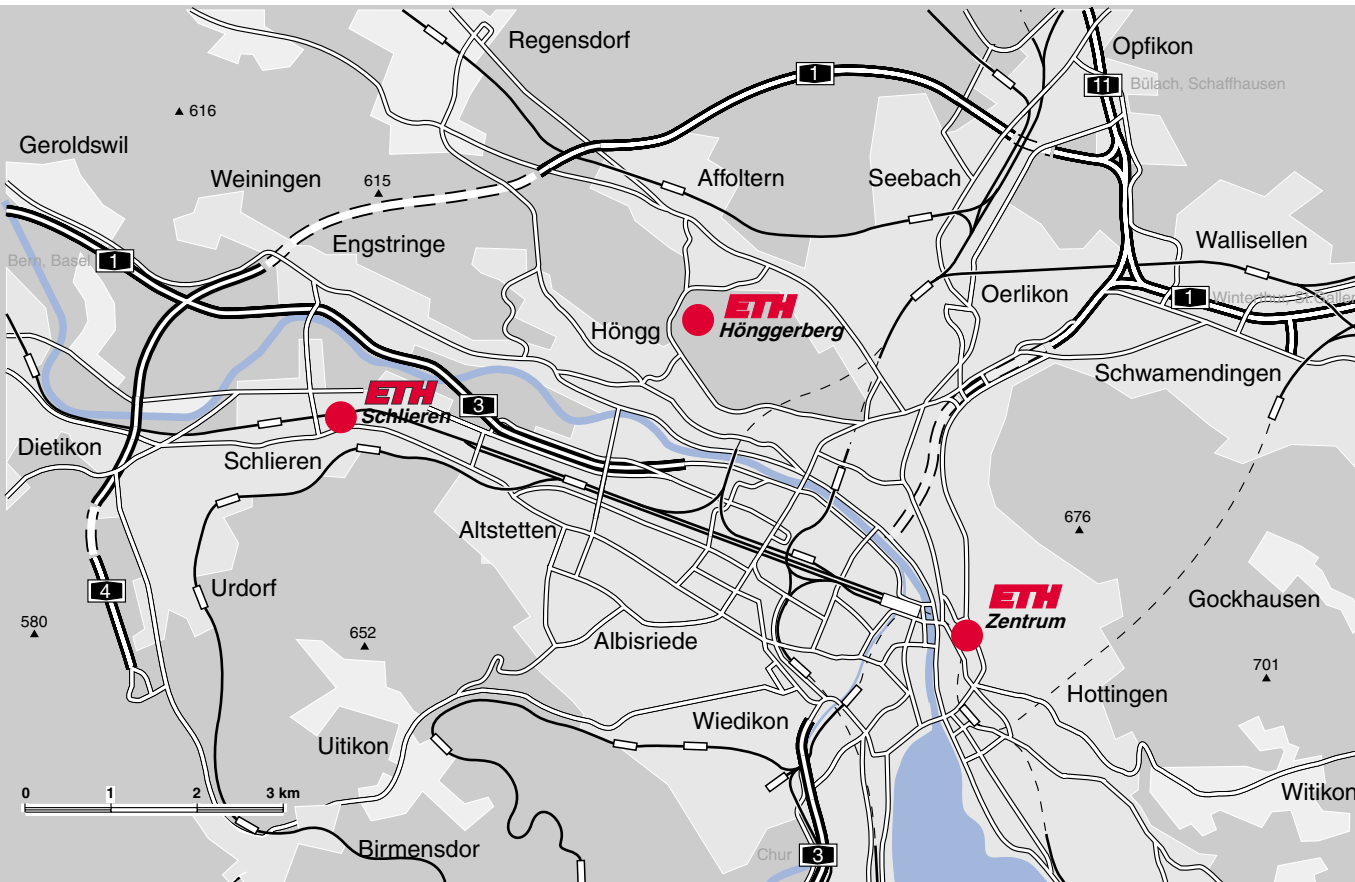
The main locations of the ETH in Zurich

http://www.ethz.ch/
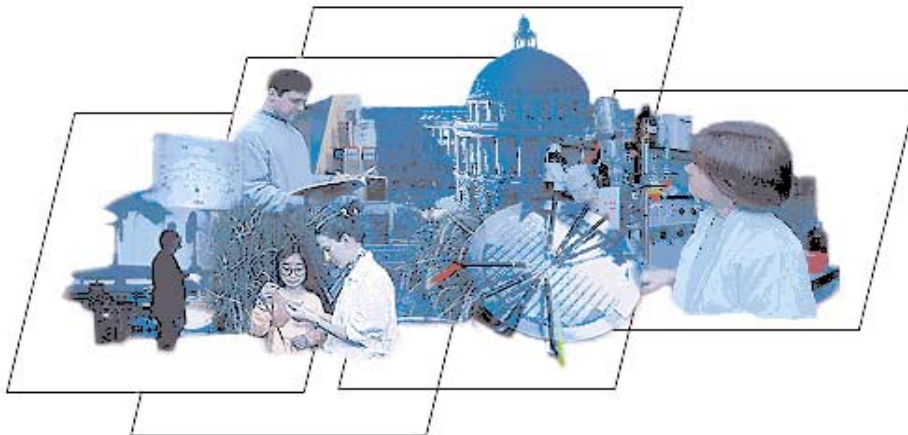
APPENDIX

BIBLIOGRAPHY

- Lee, Edward A. and Messerschmidt, David G., *A highest education in the year 2049*, proceedings of the IEEE, vol. 87, no. 9, 1999
  http://ptolemy.eecs.berkeley.edu/publications/papers/99/vision/

- Ponte, Maurice J., *A day in the life of a student in the year 2012 a.d.*, proceedings of the IRE, vol. 50, no. 5, pp. 573-575, 1962

- Schmitt Gerhard, *Information Architecture – Basis and Future of CAAD*, Birkhäuser Verlag, Basel-Boston-Berlin. 1999

- ZEIT Punkte 1/2000, *Lernen mit dem Computer*, Zeitverlag, www.zeit.de

- ZEIT Punkte 5/1996, *Der Mensch im Netz*, Zeitverlag

WEB ADRESSES

ETH ZURICH

- http://www.ethz.ch/   Homepage
- http://www.ethz.ch/overview/profile_ge.html   Leitbild
- http://www.ethz.ch/overview/nobelprize/nobelprize_ge.html   Nobel Prize Winners
- http://www.aoa.ethz.ch/whoiswho/   address list
- http://www.imc.ethz.ch/   Information Management / Controlling service
- http://www.ethz.ch/overview/overview_ge.html   Overview
- http://www.edu-net.ethz.ch/   NET (Network for Educational Technology)
- www.ethz.ch/search/building_by_abr.html   buildings of the ETH
- www.planung.ethz.ch/hauptgebaeude/projekt/projekt.html   designproject mainbuilding
- http://www.ethbib.ethz.ch/   library
- http://www.aoa.ethz.ch/   corporate communication
- http://www.weboffice.ethz.ch/   weboffice
- http://www.dienste.ethz.ch/   services
- http://www.id.ethz.ch/   computing services
- http://www.n.ethz.ch/   online service for students
- http://caad.arch.ethz.ch/teaching/caad/ss98/   CAAD seminar

SWITZERLAND

- http://stadt-zuerich.ch   Zurich
- http://www.admin.ch/bbw/   Federal office for education and science
- http://www.virtualcampus.ch   Swiss virtual campus

Abkürzung	Planfläche	Benützung	Adresse	Postleitzahl
Abbreviation	Location	Usage	Address	Postal code
ADM	B 4	Militärische Sicherheitstechnik	Auf der Mauer 2	8001
CBB	C 3	Diverses (Baracke)	Universitätstr. 6	8092
CBM	C 3	Lehrlabor (Baracke)	Universitätstr. 6	8092
CAB	C 3	Anorg.- + Techn. Chemie, Polymere (Chemie-Altbau)	Universitätstr. 6	8092
CHN	C 3	Bio-, Org.-+Physikal.-Chemie (Chemie Nord)	Universitätstr. 16/22	8092
CLA	B 4	Produktionstechniker	Tannenstr. 3	8092
CLP	B 3	Operations Research	Clausiusstr. 45	8092
CLT	B 2	Energietechnik	Clausiusstr. 33	8092
CLU	B 2	Nutztierwissenschaften (Tierzucht)	Clausiusstr. 50	8092
CLV	B 2/3	Operations Research/Mathematik	Clausiusstr. 47	8092
CLW	B 2	Informatik	Clausiusstr. 49	8092
CLY	B 2	Kinderkrippe (KIKRI)	Clausiusstr. 72	8006
CNB	C 3	Techn. Chemie und Polymere (Chemie Bautrakt B)	Universitätstr. 6	8092
ETL	D 3	Elektrotechnik (Laborgebäude)	Physikstr. 3	8092
FHK	B 3	Fernheizkraftwerk	Sonneggstr. 3	8092
ETA	D 3	Elektrotechnik (Scherrer-Hörsaal)	Gloriastr. 35	8092
ETF	D 3/4	Signal- u. Inf.verarbeitung, Kommunikationstechnik	Sternwartstr. 7	8092
ETZ	D 3/4	Elektrotechnik (Zentralgebäude)	Gloriastr. 35	8092
HG	B/C 4	Hauptgebäude ETH	Rämistr. 101	8092
GEP	B 4	Geobotanik	Leonhardstr. 34	8092
GLN	D 4	Biomedizinische Technik Uni und ETHZ	Gloriastr. 30/32	8092
HAW	B 2	Direktion Informatikdienste	Haldeneggsteig 5	8092
HCH	E 3	Betriebsabt./Sicherheit + Umweltschutz	Hochstr. 60	8092
HCW	E 3	Betriebsabt./Nutztierw.	Hochstr. 56 (hinter)	8092
HAA	D/E 4	Astronomie	Häldeliweg 15	8092
HKK	I/K 4	Kinderkrippe	Hönggerberg	8093
LEA	B 3	Studentische Organisationen	Leonhardstr. 15	8001
LEB	B 3	VSETH (StuZ)	Leonhardstr. 19	8001
LEC	B 3	Leichtbau und Seilbahntechnik	Leonhardstr. 25	8092
LED	B 3	Leichtbau, KOSTA	Leonhardstr. 25a	8092
LEO	B 3	Werkzeugmaschinen und Fertigung	Leonhardstr. 27	8092
LFG	C 3	Pflanzenwissenschaften / Gewächshaus	Universitätstr. 2	8092
LFH	C 3	Nutztierwissenschaften / Hofgebäude	Universitätstr. 2	8092
LFO	C 3	Lebensmittelwissenschaft (Ostbau)	Schmeizbergstr. 9	8092
LFV	C 3	Mikrobiologie (Versuchshaus)	Schmeizbergstr. 7	8092
LFW	C 3	Nutztierw. / Pflanzenw.	Universitätstr. 2	8092
IFW	B 2	Informatik	Haldeneggsteig 4 / Weinbergstr.	8092
MM	B 4	Turnen + Sport, GEP, Polybuchhandl., SV (Polyterr.), Mensa, ASVZ	Leonhardstr. 34	8092
MOU	E 4	Biomedizinische Technik (UNI ZH)	Moussonstr. 18	8092
ML	C 3	Maschinenlaboratorium	Sonneggstr. 3	8092
NO	B 3	Naturwissenschaften (Geb. Ost)	Sonneggstr. 5	8092
NW	B 3	Entomologie, Hygiene + Arbeitsphysiologie	Clausiusstr. 25	8092
RZ	B 2	Rechenzentrum / Informatik	Clausiusstr. 59	8092
SOI		Forum für Umweltfragen	Sonneggstr. 28	8006
SOL	B 2	Agrarwissenschaften / Statistik	Sonneggstr. 33	8092
SOP	B 3	Zimmervermittlung / Studentenbetreuung	Sonneggstr. 27	8092
SOK	B3	Umbauobjekt	Sonneggstr. 28	8092
TAN	B 4	Nutztierwissenschaft	Tannenstr. 1	8092
UNA	C 3	Diverses	Universitätstr. 9	8092
UNB	C 3	Professur for Soziologie	Universitätstr. 13	8092
UNG	C 3	Studentische Organisationen	Universitätstr. 19	8092
UNK	C 3	Werkzeugmaschinen + Fertigung	Universitätstr. 31	8006
UNL	C 2	Energietechnik	Universitätstr. 33	8006
UNO	C 2	Energietechnik / Polymertechnologie	Universitätstr. 41	8006
VAW	D 3/4	Versuchsanst. f. Wasserbau, Hydrologie + Glaziologie	Gloriastr. 37/39	8092
VOA	E 3	NADEL, Kurslokale	Voltastr. 18	8044
VOB	E 3	NADEL, vdf	Voltastr. 24	8044
VOE	E 3	Umweltnatur- und Umweltsozialwissentschaften	Voltastr. 58	8044
VOC	E 3	Wohnungen	Voltastr. 26	8044
WEC	A 3	Sicherheitstechnik, NDS Risiko und Sicherheit	Weinbergstr. 11	8001
WED		Deutsche Sprache + Literatur	Weinbergstr. 18	8001
WEH		Wirtschaftsforschung / KOF	Weinbergstr. 35	8092
WES	A 1	Diverse	Weinbergstr. 41	8092
WEB	A 3	Technikgeschichte / Archiv f. Zeitgeschichte	Weinbergstr. 9	8092
WET		Nachdiplomstudium Geistiges Eigentum	Weinbergstr. 43	8092
HIF	I 3/4	Bauwissenschaften (Geotechnik/Forschungsgeb.)	Hönggerberg	8093
HIG	H/13	Bauwissenschaften (Garage)	Hönggerberg	8093
HIL	I 3	Bauwissenschaft (Architektur, Kulturtechnik und Vermessung, ORL/Lehrgebäude)	Hönggerberg	8093
HIP	I 4	Architektur (Pavillon)	Hönggerberg	8093
HIQ	I 4	Architektur (Pavillon)	Hönggerberg	8093
HIR		Architektur (Pavillon)	Hönggerberg	8093
HIV	I 4	Gewächshaus Geobotanik	Hönggerberg	8093
HIW	14	Umweltnaturwissenschaften (Folientunnel)	Hönggerberg	8093
HKI	K 3	Kiosk	Hönggerberg	8093
HKK	I/K 4	Kinderkrippe	Hönggerberg	8093
HKW		Geschichte u. Theorie der Architekten	Kürbergstr. 25	8049
HO		ETH-Hönggerberg	Hönggerberg	8093
HPF	K 4	Festkörperphysik	Hönggerberg	8093
HPG	K 3	Physik (Garagen)	Hönggerberg	8093
HPH	K 3	Physik (Hörsaalgebäude)	Hönggerberg	8093
HPK	K/L 4	Mittel- und Hochenergiephysik	Hönggerberg	8093
HPM	K 4	Molekularbiologie + Biophysik, Molbio I der Uni	Hönggerberg	8093
HPP	L 3	Atmosphären-, Festkörper- + Geophysik (Praktikumsgeb.)	Hönggerberg	8093
HPR	K 3	Physik-Restaurant, Mensa	Hönggerberg	8093
HPT	K 3/4	Angew. Physik, Biotechnologie, Quantenelektr.	Hönggerberg	8093
HPV	L 3	Höhere Geodäsie, Physik-Departement	Hönggerberg	8093
HPZ	K 3/4	Physik-Dep., Theoretische Physik (Zentralgebäude)	Hönggerberg	8093
HSA		Hochschulsportanlagen (Allmend Fluntern)	Zürichbergstr. 196	8044
HSP	L 3	Sporthalle	Hönggerberg	8093

Abbreviations

TEAM MEMBERS

A large number of professors and coworkers of ETH Zurich were involved in the previous preparations of the overall project.

- Prof. Dr. Gerhard Schmitt, Vice President for Planning and Logistics
  Head of Project Steering Committee

  Responsible Member of Headship

- Dr. Christof Hanser, Consultant of Vice President for Planning and Logistics
  Overall Project Leader

  Project Leader

- Dr. Pamela Alean, Personnel Department
- Prof. Dr. Marc Angélil, Dep. Architecture
- Dr. Andreas Dudler, Computing Services
- Prof. Dr. Gerd Folkers, Dep. Applied Bioscience
- Prof. Dr. Markus Gross, Dep. Computer Science
- Prof. Dr. Thomas Gross, Dep. Computer Science
- Dr. Rolf Guggenbühl, Corporate Communication
- Dr. Hans Hänni, NET
- Daniel Künzle, Head of Center for Continuing Education
- Dr. Leszek Reinhard, Office of Vice President for Research and Business Relations
- Jakob Lindenmeyer, Corporate Communications
- Prof. Dr. Markus Meier, Dep. Mechanical and Progress Engineering
- Dr. Rudolf Mumenthaler, Library
- Prof. Dr. Reinhard Nesper, Dep. Chemistry
- Prof. Dr. Osterwalder, Rector of ETHZ
- Olga Pardo-Escher, Personnel Department
- Prof. Dr. Bernhard Plattner, Dep. Electrical Engineering
- Rolf Probala, Head of Corporate Communications
- Philipp Rütsche, Corporate Communications
- Prof. Dr. Walter Schaufelberger, Dep. Electrical Engineering
- Prof. Dr. Hans-Jörg Schek, Dep. Computer Science
- Cary Siress, Dep. Architecture
- Prof. Dr. Sarah Springman, Dep. Civil, Environmental and Geomatic Engineering
- Dr. Can Türker, Dep. Computer Science
- Prof. Dr. Luc van Gool, Dep. Electrical Engineering
- Peter Vonesch, Alumni office
- Dr. Lutz Leonhard, Head of Center of Didactics
- Katharina Poiger, Office of the Rector
- Prof. Dr. Albert Waldvogel, Vice President for Research and Business Relations
- Jürg Wiesmann, Personnel Department

DECLARATION OF AUTHORSHIP

ENTRY NUMBER

I / we guarantee,

1. to be the sole author of this entry,
2. that submissions correspond with the invitation to tender,
3. that no legal impediments apply to any participant (author, authorised assistant, or associates) according SIA code par. 12.2 : no employees of the jurors or experts, no relatives of the jurors or experts; employees of the sponsor may only participate if they were not directly working on the competition task,
4. the right to use and revise entries for further commissioning by the sponsor and to entrust the sponsor with these rights.

❑ **Participant**   Name   ....
❑ **Author**   Profession ....
❑ **Authorized Assistant** Address   ....

Tel, Fax   ....

e-mail   ....

Bank Account Number   ....

City, Date, Signature   ....

❑ **Author**   Name   ....
❑ **Authorized Assistant** Profession ....

Address   ....

Tel, Fax   ....

e-mail   ....

City, Date, Signature   ....

Assistants and Students   ....

....

....

....

Co-workers   ....

Name, Address   ....

Experts   ....

Name, Address, Profession   ....

(Individuals consulting in their field however not   ....

directly assisting in design contributions for the   ....

competition)   ....

Remark:
This declaration of Authorship form may not be changed or adapted in any way or form and is a binding document for all who have signed i.e. co-workers, authorised assistants and authors.

Invitation to tender

[phase eins].