

The mobile Research

Goals

The main goal of the Mobile Communication Foundation is to promote scientific research concerning the opportunities and risks associated with mobile communication. Other goals are identifying gaps in research areas, the distribution of research findings to the scientific community and to the public and to promote open communication among pressure groups.

Organization and Financial Means

The foundation is a recognized non-profit foundation. Its head office is at the ETH in Zurich. It is approved by the Swiss Federal Supervisory Board for foundations. The research foundation is strategically managed by the Foundation's board and it is managed operationally from the head office. The foundation's scientific committee decides on who will receive project support funds (diagram 1).

The foundation board consists of: 4 university research representatives, a representative from an environmental pressure/consumer group, a representative from the federal authorities and a representative from the industry (see box 1). This kind of broad support guarantees competent and independent expert management of the foundation. At the same time, a forward looking collaboration between science, authorities, environmental and industrial associations concerning research is being supported.

The scientific committee has many tasks, one major task is determining who will receive financial support for research. The president of the board, the managing di-

rector and 6 people from universities with different disciplinary backgrounds make up the committee.

The foundation has an annual budget of sfr 800,000 for 2003.

Founding Members

The foundation resulted from a research project "Research collaboration concerning sustained mobile communication systems". This collaboration project was launched in 2000 between ETH Zurich and the mobile radio provider Sunrise (at that time it was called diAx). The research funds and the ongoing project were taken over by the foundation. Along with ETH Zurich, the following three mobile radio providers are also sponsors and founding members of the foundation: Orange Communications SA, TDC Switzerland AG (Sunrise) and Swisscom Mobile AG.

Sectors being promoted

The research foundation promotes projects, which investigate important questions concerning the opportunities and risks associated with mobile radio communications. Thematically the projects could belong to one or more of the following research areas, (the list is not regarded as complete):

Health

EMF-exposure measurements, somatic and psychosomatic aspects of EMF-exposure, epidemiological questions

Biology and the environment

In-vitro, in-vivo and in-situ investigations on the effects of EMF on cells and organisms

Gregor Dürrenberger

In the beginning of 2003 the Mobile Communication Foundation was founded in Switzerland. This foundation institutionalises the collaboration between the scientific community, authorities, environmental organizations and industry. The foundation promotes scientific research concerning the opportunities and risks associated with mobile communication and the distribution of research findings.

Communication Foundation

Society

Risk perception, risk communication and regulatory issues

The development of technology

Trends in technology, limits of technology prognoses, eco-design of mobile radio telephones and mobile radio infrastructures (LCA's)

Landscape and aesthetics

The design of mobile radio infrastructure, dismantling concepts, optimising network design

Research support procedure

The deadline for submitting a brief project proposal is on September 1 of each year. Public and private research institutions may apply. The submitted proposal will be assessed within one month by the scientific committee according to the usual criteria for research projects. The successful applicant will be asked to submit a full proposal concerning their project idea. The full proposals are once again assessed by the scientific committee. Successful applicants will receive a contract to sign. The evaluation process takes approximately 3 months. The application forms can be

downloaded from the foundation's homepage (see box p. 36). Basically only high quality research will be supported. An exception to this may be providing seed money for preliminary projects in certain emerging fields.

The research foundation generally covers personnel costs and special costs for field investigations (equipment, consumable materials, expenses etc.). Standard equipment, office equipment, laboratory apparatuses and travelling costs to conferences are not financed. Salaries for doctoral candidates must be budgeted at normal institutional rates.

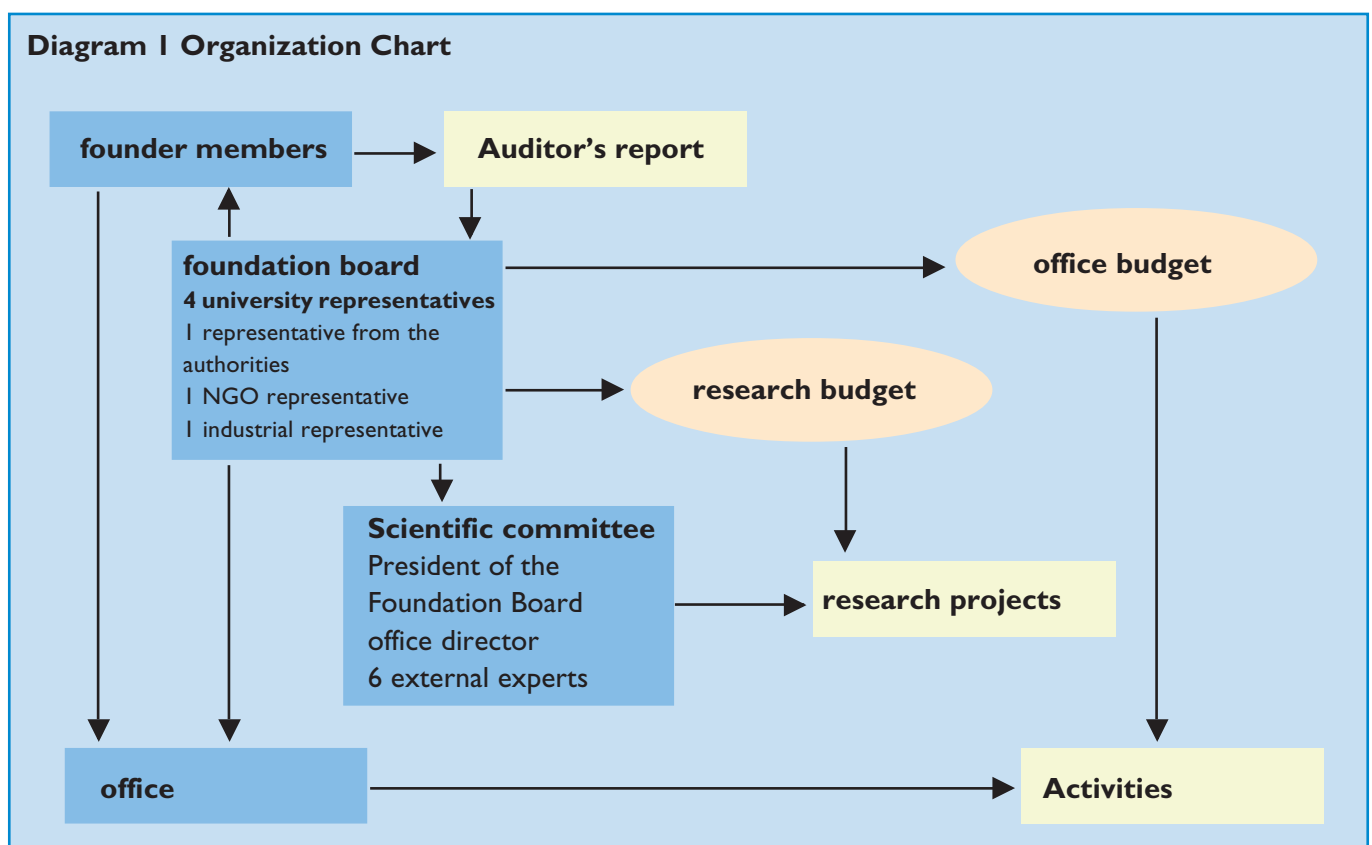
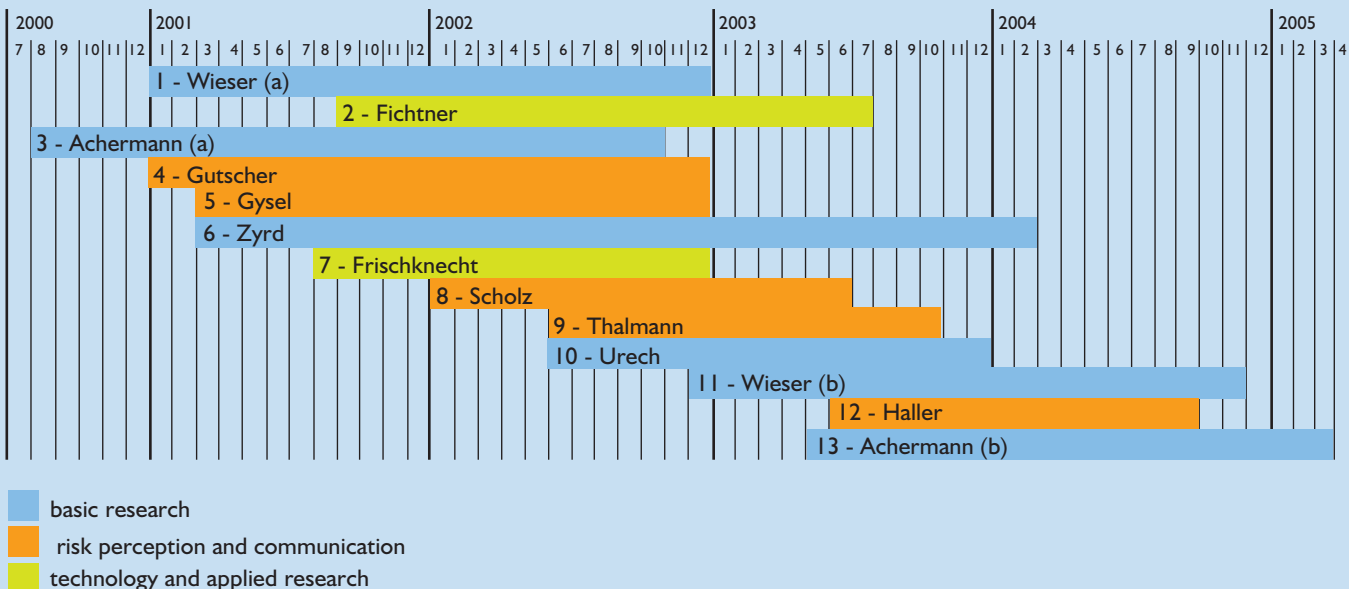


Diagram 2: Project overview



Overview of research projects

Ongoing projects

Titel: Defining measurement standards and reducing measurement uncertainty for indoor EMF measurements
Applicants: Prof. W. Fichtner, Prof. N. Kuster
Institution: ETH Zürich, Institut für Integrierte Systeme
Duration: September 2001-July 2003-09-07
Contact: kuster@itis.ethz.ch
Reference: 2 (see diagram 2)

Titel: The influence of RF electromagnetic fields on the development and the molecular biology of moss physcomitrella patens and the nematode caenorhabditis elegans
Applicants: Prof. J-P. Zryd, Dr. F. Rachidi
Institution: Universite' Lausanne, Institut d'Ecologie
Duration: March 2001-February 2004
Contact: jzryd@ie-pc.unil.ch
Reference: 6

Title: Conditions of risk perception concerning mobile radio communication and its dependency on different types of knowledge transfer
Applicants: Prof. R.W. Scholz, D. Grasmück
Institution: ETH Zurich, Umweltnatur- und Sozialwissenschaften
Duration: Januar 2002-June 2003-09-07
Contact: scholz@uns.umnw.ethz.ch
Reference: 8

Title: The impact of information frames from EMF-studies on laypersons' risk perception and their evaluation of the overall scientific picture
Applicants: A.T. Thalmann, P.M. Wiedemann, H. Schütz
Institution: Forschungszentrum Jülich
Duration: June 2002-October 2003
Contact: a.t.thalmann@fz-juelich.de
Reference: 9

Title: Investigations on the mutagenicity of GSM-UMTS-fields with the Tradescantia micronucleus Bioassay for detecting mutagenicity of GSM-fields
Applicants: Dr. M. Urech, Dr. H. Lehmann, Dr. Ch. Pickl
Institution: puls Umweltberatung, Swisscom, Ökotox GmbH
Duration: July 2002-December 2003
Contact: martin.urech@pulsbern.ch
Reference: 10

Title: The effects of low frequency signal components from mobile phone emissions on brain activity
Applicants: Prof. H.G. Wieser, Dr. J. Dobson
Institution: University Hospital Zurich, Neurological Clinic
Duration: December 2002-November 2004
Contact: hgwepi@neurol.unizh.ch
Reference: 11

Title: Participation research concerning the dialogue on sustainable mobile communication
Applicants: M.Haller, B. Zucker, K. Meier

Institution: Stiftung Risiko-Dialog, St. Gallen
Duration: June 2003-September 2004
Contact: katrin.meier@risiko-diaglog.ch
Reference: 12

Title: Dose-effect relationship of GSM-fields (hand-set like) on sleep and sleep EEG

Applicants: PD Dr. P. Achermann, Prof. N. Kuster
Institution: Universität Zurich, Institut für Pharmakologie
Duration: April 2003-March 2005
Contact: acherman@pharma.unizh.ch
Reference: 13

Completed projects

Title: A ferromagnetic transduction for biological effects of high frequency electromagnetic radiation

Applicants: Prof. H.G. Wieser, Dr. J. Dobson
Institution: University Hospital Zurich, Neurological Clinic
Duration: January 2001-December 2002
Contact: hgwepi@neurol.unizh.ch
Reference: 1

Title: Effects of EMF exposure, type GSM on sleep, sleep EEG and on regional cerebral blood flow

Applicants: PD Dr. P. Achermann
Institution: University of Zurich, Institute for Pharmacology and Toxicology
Duration: August 2000-October 2002
Contact: acherman@pharma.unizh.ch
Reference : 1

Title: Electromagnetic fields : Risk perception, social trust and confidence

Applicants: Prof. H. Gutscher, Dr. M. Siegrist, Dr. T.C. Earle
Institution: University of Zurich, Psychological Institute
Duration: January 2001-December 2002
Contact: siegrist@sozpsy.unizh.ch
Reference: 4

Title: Monitoring print media coverage on EMF-risks

Applicants: Dr. U. Gysel, H. Kuhn, Dr.D. Perin, V. Wyss
Institution: Zürcher Hochschule Winterthur
Duration: March 2001-December 2002
Contact: heinrich.kuhn@zhwin.ch
Reference : 5

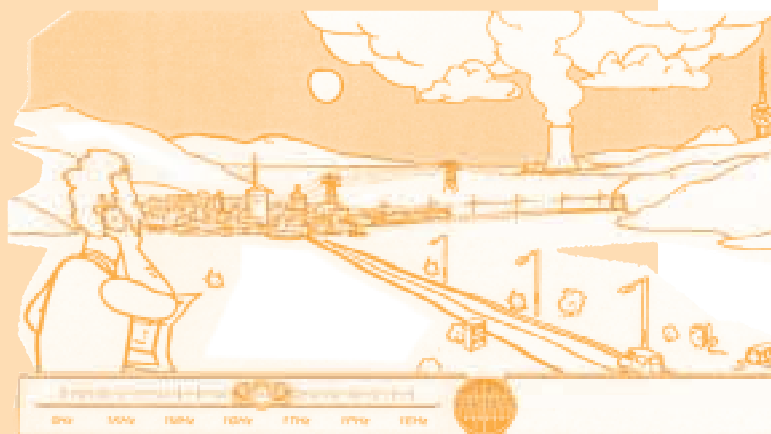
Title: Eco-assessment of mobile communications systems with regard to eco-efficient systems

Applicants: Dr. R. Frischknecht
Institution: ESU, Services, Uster
Duration: August 2001-December 2002
Contact: frischknect@esu-services.ch
Reference: 7

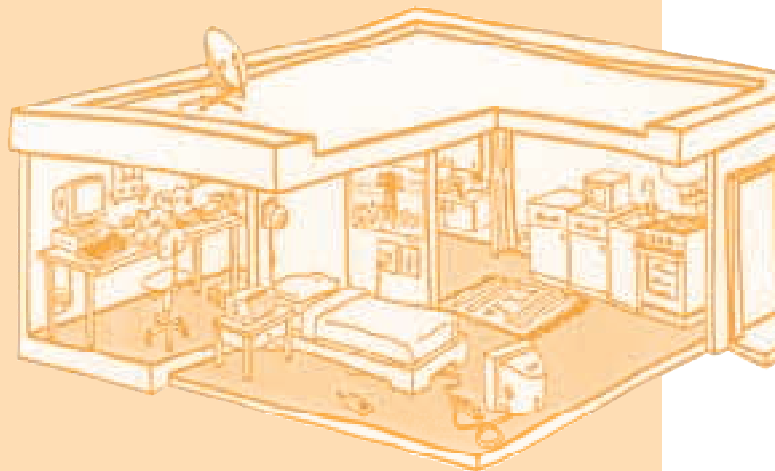
Interactive information platform

Under <http://www.emf-info.ch>, an interactive information platform on the subject EMF and mobile communication can be downloaded. The platform contains a detailed catalogue of questions and answers, a visitor to the site can either obtain the information via two animated searching images, one presents radiation sources outdoors and the other presents radiation sources indoors, or one can go directly to the topic index. There is also an entertaining quiz on the latest findings.

Outdoor-searching image:



Indoor-searching image:



Services

Enquires can be made to the research foundation by those who are especially interested in the subject and by institutions and those who are involved with the subject matter.

The research foundation offers the following services:

- Information and advice
- Participating in informational meetings
- Expert opinions and scientific reviews
- Courses, scientific seminars, conferences, project coaching

The participation in informational meetings and the distribution of information, e.g., in principle answering telephone enquires is free of charge. With regard to the participation in meetings, the research foundation decides autonomously. For those interested, the foundation has installed an interactive information platform on the Internet. Visitors to the site can find in a playful question and answer section, questions which are frequently discussed by the public. (see box S.35).

The fees for expert activities (comments on scientific publications, reviews, and oth-

er scientific jobs are calculated on an hourly basis. The hourly fee for 2003 is sfr 50 per hour.

As requested and arranged with the those interested (authorities, NGOs, network operators, and others) the research foundation offers further education courses, scientific events, or project coaching. These activities are charged at real cost.

Dr. Gregor Dürrenberger is the Executive Officer of the Research Foundation.



Staff organization

The members of the Foundation Board are:

- Prof. Werner Bächtold (president)
ETH Zurich, Department of Information Technology and Electro-technology
- Dr. Mirjana Moser (Vice-president)
Bundesamt für Gesundheit (BAG) Abteilung Strahlenschutz (*Federal Office for Health; Department of Radiation Protection*)
- Dr. Bernhard Aufderreggen,
President, Ärztinnen und Ärzte für Umweltschutz, (*Doctors for the Environmental protection*)
- Prof. Dieter Imboden
ETH Zurich, Department of Environmental Science
- Prof. Niels Kuster
ETH Zurich, Department of Information Technology and Electro-technology
- Gert Rieder
Coo Mobile, Sunrise
- Prof. Heinz-Gregor Wieser
University Hospital Zurich, Neurological Clinic.

Office

- Dr. Gregor Dürrenberger
- Nicole Heuberger

The members of the Scientific Committee are:

- Prof. Dr. Heinz Gutscher (chairman)
University of Zurich
Psychological Institute, Department Social Psychology
- Dr. Peter Achermann
University of Zurich, Institute for Pharmacology and Toxicology
- Prof. Dr. Werner Bächtold
ETH Zurich, Department of Information Technology and Electro-technology
- Prof. Dr. med. Christoph Beglinger
University of Basel, Division head, Gastroenterology.
- Prof. Dr. med. Charlotte Braun-Fahländer
University of Basel, Institute for Social and Preventative Medicine
- Dr. Gregor Dürrenberger
ETH Zurich, Executive Officer of the Research Foundation Mobile Communication
- Prof. Dr. Martin Hasler
ETH Lausanne, Faculty for Information and Communication
- Dr. Christoph Schierz
ETH Zurich, Institute for Hygiene and Occupational physiology

Information and contacts

Important information concerning the Research Foundation, documents and descriptions of ongoing projects can be retrieved on the homepage of the Research Foundation: <http://www.mobile-research.ethz.ch>

Please send any enquires you may have to Nicole Heuberger Nicole@mobile-research.ethz.ch. If you would like to be added to our distribution list, e-mail us your address at: info@mobile-research.ethz.ch