

International EMF Project
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National Report Switzerland

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1. General Research Activities

The Swiss Research Foundation for Electricity and Mobile Communication (FSM)

FSM is a non-profit foundation, founded in 2002, sponsored mainly by industry, but supported by government, NGOs and research organisations. The aim of the FSM is to promote innovative research projects in the mobile phone sector and distribute the resulting research findings to scientists and the public. Following research areas are covered: basic research, risk perception & communication and technology & applied research. The annual research budget amounts to 550'000 basically. Information on the FSM as well as on the research projects can be found under <http://www.emf.ethz.ch/en/>

The Foundation for Research on Information Technologies in Society (It'Is)

It'Is is a non-profit research foundation that has been founded in 1999 with the aim to create a flexible and dynamic research institution capable of addressing the research needs of society in the explosively expanding field of information technologies. Information on the It'Is and on their research projects are available under: www.itis.ethz.ch

Swiss Tropical and Public Health Institute (Swiss TPH)

The Swiss TPH is a public organization of the Basel-City region. The Swiss TPH has become a world-renowned institution for teaching, research and services in the field of international health development.

Concerning EMF, the latest project of the Swiss TPH is a new cohort study, which has the aim to prospectively investigate whether exposure to RF-EMF emitted by mobile phones and other wireless communication devices affects cognitive functions, and whether it causes behavioural problems or non-specific health disturbances in adolescents. This study is funded by Swiss National Science Foundation.

Research Activities supported by the Federal Office of Public Health (FOPH)

The FOPH mandated It'Is Foundation to do measurements about new **wireless LAN standards** (802.11 n and 802.11 ac) in order to be able to update the existing factsheet of the FOPH about wireless LAN.

Data about **smart technologies**, such as wrist watches which are used for recording activity patterns, are missing for the moment. Therefore the FOPH mandated the It'Is Foundation to close this gap and to do measurements and simulations to calculate common and worst-case exposure situations of these devices. The results of this project will give an overview of the current market situation of such devices and out of all the devices, ten will be chosen for measurements and simulations.

Research Activities supported by the Federal Office for the Environment (FOEN)

Validation of the methodology - Exposure map for low-frequency magnetic fields from high-voltage power lines

The methodology derived in a feasibility and pilot study “Exposure map for low-frequency magnetic fields from high-voltage power lines” in 2010/2011 was validated with measurements in the vicinity of two high voltage power lines. The comparison of calculated and measured temporal averages of the magnetic flux density showed a very good agreement, and the deviations were of the order predicted in the pilot study.

https://www.bafu.admin.ch/dam/bafu/de/dokumente/elektrosmog/externe-studien-berichte/Messungen_zur_Validierung_der_Methodik.pdf.download.pdf/Messungen_zur_Validierung_der_Methodik_Immissionskataster_fuer_niederfrequente_Magnetfelder_von_Hochspannungsfreileitungen.pdf

2. New Policies and Legislations

Protection of public from non-ionizing radiation and sound

The Federal Council has given a mandate to the Federal Department of Home Affairs to elaborate a draft law. This draft law has the aim to improve health protection from non-ionizing radiation (NIR) and sound. The future law shall for example regulate the use of sun beds, the use of cosmetic NIR-applications or the handling of laser pointers. The draft law was in public consultation from April to July 2014. The main concern in the consultation was if it is necessary to build a new law for solving the above-mentioned issues. In February 2015, the Federal Council decided that it is necessary to build this new law and gave a mandate to the Federal Department of Home Affairs to elaborate until the End of 2015 the message and the final law. On 11 December, the Federal Council transferred the message and the final draft of the law to the parliament. Since April 2016 the parliament deliberates on this draft and only slight changes have been made by the parliament. The final vote is planned for summer 2017. After the final vote, the FOPH will elaborate the corresponding ordinance.

Ordinance relating to Protection from Non-Ionising Radiation (ONIR)

A parliamentary motion demanding a weakening of the precautionary emission limitations for mobile phone base stations has been rejected by the Swiss Parliament, therefore the precautionary installation limit values in the ONIR remain at 4-6 V/m for this type of installations.

There is currently a public consultation on the draft execution aid relating to the reduction of emissions of artificial light.

3. Areas of public concern and national responses

4. New public information activities

FOEN - Swiss expert group on electromagnetic fields and non-ionising radiation (BERENIS)

The FOEN has nominated a consultative group of Swiss experts from various disciplines with scientific competence regarding electromagnetic fields and non-ionising radiation, which has commenced its work in July 2014. The group is called “BERENIS”, based on the acronym of the respective German term. The BERENIS experts regularly screen the scientific literature, and use defined criteria to assess the publications, which they consider as relevant for the protection of humans from potentially adverse effects. The evaluations are published in quarterly newsletters in English, German and French. The first newsletter is available online:

<http://www.bafu.admin.ch/elektrosmog/15188/index.html?lang=en>
<http://www.bafu.admin.ch/elektrosmog/index.html?lang=de>
<http://www.bafu.admin.ch/elektrosmog/index.html?lang=fr>