

Workshop on possible biological and health effects of RF electromagnetic fields *Vienna EMF-Resolution*

For Biomedical and Risk Research:

Carl Blackman, Environmental Protection Agency, USA, Blackman.Carl@epamail.epa.gov

Neil J. Cherry, Lincoln University, New Zealand, cherry@kea.lincoln.ac.nz

G. Käs, Bundeswehrhochschule Neubiberg, Deutschland

Lebrecht von Klitzing, Universität Lübeck, Deutschland, klitzing@medinf-mu-luebeck.de

Wolfgang Kromp, Inst. f. Risikoforschung, Universität Wien, wolfgang.kromp@irf.univie.ac.at

Michael Kundi, Inst. f. Umwelthygiene, Universität Wien, michael.kundi@univie.ac.at

Henry Lai, University of Washington, USA, hlay@u.washington.edu

William Leiss, Queen's University, Kanada, leiss@saltspring.com

Theodore Litovitz, Catholic University of America, USA, litovitz@cua.edu

Kjell Hansson Mild, National Institute for Working Life, Sweden, mild@niwl.se

Wilhelm Mosgoeller, Inst. f. Histologie u. Embryologie, Universität Wien, wilhelm.mosgoeller@univie.ac.at

Joachim Röschke, Psychiatrische Klinik, Universität Mainz, Deutschland, roeschke@goofy.zdv.uni-mainz.de

Felix Schinner, Inst. f. Risikoforschung, Universität Wien, felix.schinner@univie.ac.at

Stanislaw Szmigielski, Militärinstitut für Hygiene und Epidemiologie, Polen, szmigielski@wihe.waw.pl

Luc Verschaeve, Div. of Energy and Environm. Research, V.I.T.O., Mol., Belgium, verschal@vito.be

Ulrich Warnke, Universität des Saarlandes, Deutschland, warnke@rz.uni-sb.de

Disclaimer: personal opinion, does not necessarily reflect the views of the associated institution

The preferred terminology to be used in public communication:

Instead of using the terms "athermal", "nonthermal" or "microthermal" effects, the term "low intensity biological effects" is more appropriate.

Preamble: The participants agreed that biological effects from low-intensity exposures are scientifically established. However, the current state of scientific consensus is inadequate to derive reliable exposure standards. The existing evidence demands an increase in the research efforts on the possible health impact and on an adequate exposure and dose asses.

Base stations: How could satisfactory Public Participation be ensured?

The public should be given timely participation in the process. This should include information on technical and exposure data as well as information on the status of the health debate. Public participation in the decision (limits, siting, etc.) should be enabled.

Cellular phones: How could the situation of the users be improved?

Technical data should be made available to the users to allow comparison with respect to EMF-exposure. In order to promote prudent usage, sufficient information on the health debate should be provided. This procedure should offer opportunities for the users to manage reduction in EMF-exposure. In addition, this process could stimulate further developmentlow-intensity emission devices.

For further information: <http://www.irf.univie.ac.at/emf/>,

Prof. Dr. Michael Kundi, Inst. f. Umwelthygiene, Email: michael.kundi@univie.ac.at

Dr. Felix Schinner, Inst. f. Risikoforschung, Email: felix.schinner@univie.ac.at

Dr. Wilhelm Mosgöller, Inst. f. Histologie und Embryologie, Email:
wilhelm.mosgoeller@univie.ac.at

Petition

concerning the extension of Mobile phone System installation and the related issues about health, environment, economy, and legal aspects.

Preamble

During the last years the fast progression of the mobile phone systems (GSM) resulted in a massive increase of electromagnetic field exposure in residential areas. This situation will be aggravated with every additional network provider.

At the same time it is established that the GSM-signal, which utilizes pulsed electromagnetic fields, is interacting with biologic systems.

Measurements in the city of Salzburg - Austria showed that pulsed GSM electromagnetic fields exceeded the other prevalent EMF fields like TV and Radio up to 100 times.

A satisfactory protection of neighbours interests is not warranted by the applicable laws. The constitutional right of protection of life and health is vastly neglected.

In summary, considering legal aspects there is protection deficit in the public and private laws which is unsatisfactory. The legislator is requested to solve the conflict of interests between the industries commission on one side and the neighbours involvement and their interests on protection of life and health on the other side. Because of the constitutionally determined objectives of the state to comprehensively protect the environment, there is a demand of acting precautionary on the political and legal level.

The currently used national and international practised strategy to determine limit values is extremely conservative, it urgently demands replacement by the precautionary principle, similar to strategies in many other sciences. The "Salzburg-model" showed, that neighbour involvement and a precautionary limit value of 1 mW/m² EMF-flux-density can be achieved even for the sum of all GSM frequencies without technically compromising the quality of the GSM net. Measures by the Austrian Research Centre Seibersdorf revealed that in Salzburg the computed exposure values before mast erection correlated well with the real exposure after erection and switching it on.

This petition and the demanded actions, in particular the request to introduce the Salzburg limit values, also consider the interests and rights of handyusers and the interests in protection of consumers and their health through application of the precautionary

principle. According to the experiences in Salzburg it is possible to use mobile phones without noticeable problems and stay within the specific limit values.

In view of the petitioner the government is involved in the following aspects:

1. 1. the petition concerns the national law on telecommunication (ministry of science and transport)
2. 2. law on protection of non ionising radiation (ministry of women and consumer affairs)
3. 3. the issues over governmental responsibilities with respect to the extensive installation of GSM need clarification to define the competence of the relevant ministries.
 - a) Ministry for work, health and social affairs
 - b) Ministry for women and consumer protection
 - c) Ministry for justice
 - d) Ministry for economical affairs
 - e) Ministry for science and transport
 - f) Ministry for environment, youth and family
 - g) Ministry for teaching and cultural affairs

P E T I T I O N

The parliament is requested to take notice of the following entities:

more than hundred specific resolutions of austrian communities,
specific resolutions of the county of Oberösterreich,
resolution of the district council of Salzburg,
the Vienna declaration on electromagnetic fields (scientific meeting University of Vienna),
the appeal of the meeting of german speaking medical boards to the European Parliament.

The parliament should take the following actions:

1. 1. the telecommunication law should be amended such that in the process of erecting a base station the neighbours and the communities must become involved. This is justified in particular because of the written expression and reassurance of the Ministry of women affairs and consumer protection who communicated that the providers explicitly declared towards the government to erect base stations only in consent with the neighbours (letter of the Ministry dated April 8th, 1998)
Furthermore the "Volksanwaltschaft" (institution for conflict solution related to administrative problems) wrote in a letter dated Oct. 16th, 1998: " It is within the competence of the legislator

to modify the telecommunication law such that the neighbours become involved in the process of base station erection."

2. 2. With every county a contract according to art. 15 AB-VG (constitutional law) should be signed to impose neighbour-rights and introduce the duty to subject any base station to approval. The basis for the specific federal laws should be the current Salzburg regulation which may be extended to the whole country
3. 3. A new law should retain from the limit values of the International Commission for Non Ionising Radiation Protection (ICNIRP) updated April 1998 and from the derived EU-commissioners recommendation dated June 1999 and the derived exposure values of the Austrian Standard "ÖNORM S 1120" dated July 1992 dealing with the signals of GSM base stations. The current values should be amended by introduction of the precautionary principle and the Salzburg limit value of 1 mW / m². The recommendations of ICNIRP protect in the high frequency range only from heating above 1 degree C but they do not protect from biological effects in the low dose range which can occur at exposures below the ICNIRP values. ICNIRP ignores in their analyses that numerous studies published in the recent years did show biological effects below their recommended limit values. In particular the precautionary principle was not applied to the current limit values, the pulsed frequencies which seem to be more biologically active were not considered different.
4. 4. Because of the above outlined reasons the precautionary principle should be applied to issues of health and consumer protection through national law. The government is called to enforce the precautionary principle for all of Europe. It is to be demanded that concerning base stations the limit values of the Salzburg model of 1 mW/m² EM-flux density for all prevalent GSM-fields to be imposed for the entire country.
5. 5. A law should be passed to produce a nation-wide register of EM-emission and - immission of GSM-base-stations including micro- and indoor-.cells. This register should be updated and published on a regular basis.
6. 6. A more detailed and improved testing of intertechnical EMF-compatibility of pulsed EM high-frequency-fields, in particular to medical devices and body implants (e.g.pacemakers and hearing aids) and testing of security in traffic is needed. Even the AUVA (Austrian public general casualty insurance) calls for labelling of EMF-emitting devices and calls for increased protection of medical devices and implants for every day life.
7. 7. By law the antennas producing pulsed fields (like GSM base stations, microcells, indoor cells, mobile phones, cordless phones and wireless computing networks) should carry labels to tell the EMF-emission (indicating EM-fluxdensity of the devices).

8. 8. Because of the the urgent need of research a funds (research fund entitled: „mobile phones - health and well-being") should be created for independent national and internationally coordinated research in advance of and accompanying new technical items. This should fund research on aspects of mobile communication like health and well-being. The funds should be provided by the licencing fees.
9. 9. To provide a liability, regardless of fault and wilful or negligent wrongdoing concerning the potential health endangement by EMF with reverse burden of proof.
10. 10. A symposium on issues of the mobile phone systems should be held in the parliament to discuss the issues of this petition. It is of major importance that national and international scientists who argue in favour of the precautionary principle and furthermore delegations of activist groups become invited. Similar symposia were held in Paris and London in 1999.
11. 11. In respect to new and future legal regulations at the national and European level concerning GSM- emmissions and - immissions the following points need to be considered:
 - • the precautionary priniciple is established in the treaty of Amsterdam.,
 - • in the EU-parliamental committee "Environment, welfare, and consumer protection", the lowering of the limit values for EMF and minimal distances from mobile phones to public buildings, homes and working places have been discussed. The current limit values at that time have not been lowered, but they should be considered as a recommendation for the EU-member states. They are not binding, hence they can be lowered by any country.
 - • At a recent international symposium on possible health effects of mobile phone systems which was held at the University of Vienna in Oct 1998, it was scientifically established that biological effects in the low dose range of EMF are established (Vienna EMF declaration)
 - • the "consulting congregation" of the german speaking medical boards called in July 1999 the european decision makers to apply the precautionary principle to the limit values for pulsed mobile phone systems. The congregation pointed out the particular positive experiences with lowered limit values in Salzburg,
 - • national and international Insurances explicitly refuse to cover EMF-related heakth risks.
 - • at the constitutional level, one of the states objectives is the extended environmental protection,
 - • the Federal Environmental Bureau writes in a letter dated June 16 th, 1998 to the Ministry for Environment, Youth and Families: „.....amendmend of the telecommunication laws such that the

installation of mobile phone systems should be done in a way to keep the EMF-exposure of the population as low as possible. Existing networks should be amended retrospectively in due time."

- • in a letter to the Ministry of Science and Transport (dealing with telecommunication issues) dated May 6th, 1998 all Austrian "Umweltanwaltschaften" (county environmental bureaus) called for involvement of local authorities, neighbours and local nearby residents. Furthermore existing base stations should be subjected to the same process suggested for the new base stations. The providers should be placed under obligation to share erected base stations wherever possible. Furthermore they should provide regional planning concepts for the distribution of base stations,
- • the Municipal Authority for health and environmental protection in Graz (report dated March 27th 1998) also calls for limit values according to the precautionary principle which are below the recommendation of the ICNIRP or WHO values,
- • the Federal Government of the county Oberoesterreich has passed two resolutions dated
- • April 10th, 1997 and June 4th, 1998 in which the state is asked to establish the rights of the neighbours in the telecommunication law,
- • the Salzburg district council demanded on July 8th 1998, to establish the EMF-exposure limit value which follows the precautionary principle for the whole country,
- • in Salzburg the escalation of open conflicts between residential activists "for protection from GSM base stations" and one particular provider were solved successfully through the interference of local authorities who imposed the precautionary principle (Salzburg model),
- • computations and real measurements by official authorities have shown that the Salzburg precautionary limit value allows for functional networks if carefully prepared,
- • more than 120 communities support the resolution of the Austrian Environmental Umbrella Organization (OeGNU). The OeGNU-resolution asked for an austrian and internationally coordinated research initiative using funds from specifically devoted money to EMF issues. Furthermore involvement for neighbours in the base station erection planning, amendmend of the burden of proof concerning health issues, clarification of the issue over risk liability, to ban base stations from sensitive areas and the application of the precautionary principle.

12 -The precautionary principle in EMF issues should become part of the federal constitution to take into account basic principles of health care

and environmental and consumer protection. The competences between national and federal authorities need to be sorted out.

13 -The relevant ministries are requested to bring in and establish information activities which are independent of the specific industries and to inform people about established and possible risks.