

Complaint to the European Commission concerning the 2015 SCENIHR opinion on potential health effects of exposure to electromagnetic fields.

The European Commission has once again failed in setting up an expert group on the health effects of exposure to electromagnetic fields that meets its own principles of “*of excellence, independence and impartiality, and transparency*” ([COMMISSION DECISION of 5 August 2008](#)).

The 2015 report [Opinion on potential health effects of exposure to electromagnetic fields SCENIHR](#) is written by an unbalanced expert group and most of them are not free from influences and ties to the industries that have huge economic interests in the outcome of such opinions (annex 1).

The experts behind the report blatantly fail in their main mission: to identify “*potential health risks*”. There is evidence that clearly, convincingly and increasingly establishes that there are many potential negative health effects and health hazards: brain tumours, cancer, neurodegenerative diseases, damage on fetuses and stress related diseases, as communicated to the Commission by the Bioinitiative group¹. The SCENIHR report ignores the scientific evidence of health risks from levels of exposure to electromagnetic fields that practically everybody is increasingly exposed to, including small children, in most countries in Europe today.

They also present studies in a manipulative way which we expose in annex 2 in a critical analysis of the section on brain tumour risks from mobile phone use.

This rather limited group of experts who wrote the SCENIHR report had previously clearly expressed their negative attitude to possible health effects from EMF – in well known contrast to the opinion of a large and increasing number of the scientific expertise of the EMF scientific arena.

As an example, in May 2015 [195 international EMF scientists](#) sent an appeal to the United Nations, the WHO and it’s member states calling for better protection for the public from known health risks, more stringent standards and broader information to the public. No representative from this side of the scientific community was represented in the SCENIHR report. Many of these 195 scientists are well respected, with decades of experience from the EMF health effects research.

We call for a new balanced assessment that better meets the Commissions own principles. A new balanced and objective report, without the influence from industry biased experts, is urgently needed if the Commission does not want to continue to put Public Health at serious risk by policies based on incomplete, severely biased and false information. The SCENIHR report, as it stands, is a disservice and a threat to the health and well-being of the people of Europe.

¹ <http://www.bioinitiative.org/submission-of-comments-on-final-scenihr-opinion-from-the-bioinitiative-working-group/>

1. The lack of excellence, impartiality/independence and balance

The new SCENIHR expert group was from the start not prone to submit an objective presentation of the available scientific knowledge. It was, by its composition, largely biased towards a pro-industrial outcome.

According to COMMISSION DECISION 2008, article 15, the experts *“shall undertake to act independently of any external influence”*. Therefore they *“shall make a declaration of commitment to act in the public interest and a declaration of interests indicating either the absence or existence of any direct or indirect interest which might be considered prejudicial to their independence.”*

In spite of repeated criticism about the unbalanced composition and biased reports from previous SCENIHR opinions (2007, 2009) and at the SCENIHR conference 2011 (annex 3), the new SCENIHR 2015 report is made by a group of individuals, **that actually wrote the report and its conclusions**, who practically all have known ties to industry (annex 1).

We have not yet received a valid explanation from the Commission for the exclusion of the important and well known section of the EMF scientific expertise that are of the opinion that there is clear and growing evidence of many potential negative health effects, including life threatening diseases. Instead the Commission has, for over a decade, favored an industry friendly, one sided expertise.

The Scientific Committee

There are two SCENIHR expert groups that are responsible for the SCENIHR EMF 2015 report: **The Scientific Committee** that accepted the report and the conclusions made by a second group, **The Working Group**.

The Scientific Committee is made up of 14 experts, but **only two are experts on EMF, Theodoros Samaras and Norbert Leitgeb**. Neither Mr. Samaras nor Mr. Leitgeb are health experts, they are technical oriented experts (physics, engineering).

Mr. Samaras and Mr. Leitgeb therefore must have had the most influence over the eventual discussions about the proposed report and conclusions from the Working group. The other 12 members Committee are not experts on health effects from EMF and have had no possibility to judge what is right from what is wrong in the report.

This is a lack of excellence on potential health effects from EMF in the scientific committee.

It seems crucial that these two most influential experts in the committee that adopted the SCENIHR report from the Working group, **Mr. Theodoros Samaras and Mr. Leitgeb** meet the

principles set out by the Commission “*of excellence, independence and impartiality, and transparency*”. Particularly when dealing with health effects where there are well known huge economic interests at stake, in this case from the telecommunications, IT and electric power industry.

However both Mr. Samaras and Mr. Leitgeb have ties to industry and organizations with a pro-industry attitude to health effects. They have repeatedly taken the industry friendly position that there are no health risks (*intellectual bias*). Both Mr. Samaras and Mr. Leitgeb are at present or have been members of standard setting organizations **Theodoros Samaras in IEEE and Norbert Leitgeb in ICNIRP**. The organizations are well known to act in favor of industry interests and are long time deniers of possible health effects below their own standards to which the industry has adopted its products and technology: The standards from IEEE and ICNIRP are supported by industry and IEEE is dominated by industry representatives.

Mr Theodoros Samaras declared that he is an ex-consultant for **Vodafone**, a major telecommunications company. **He failed to declare that he is also advisor to and former employee of IT’IS, according to documents from IT’IS^{2,3}**. Mr. Samaras is "a long-term friend and colleague of the IT’IS foundation".⁴ IT’IS is an organization **funded by the major telecommunication companies⁵**.

Mr Norbert Leitgeb has, for over a decade, clearly declared his opposition to potential health effects from mobile phone radiation, for instance base stations. He claimed in 2003 that studies on health effects from base stations was a waste of time and money⁶ and that there was “a greater need to reassure the public”.⁷

These examples expose unacceptable lack of independence and impartiality for the most influential persons in the Committee and particularly for the most influential expert behind the report, Mr. Samaras, both chairman of the Working group and member of the Committee.

The Working Group

The expert group actually wrote the SCENIHR report and made its conclusions, called the **Working group** or the **External experts**. This group is made up of 12 experts including its chairman, **Theodoros Samaras**.

The majority of the working group’s members also fail to meet the principles of *independence and impartiality* as evidenced by our review in annex 1.

² <http://www.itis.ethz.ch/assets/Downloads/Annual-Reports/ITISReport2014web.pdf> page 5

³ <http://www.itis.ethz.ch/who-we-are/>

⁴ <http://www.itis.ethz.ch/news-events/news/awards/award-for-best-scientific-paper-presented-by-a-student-at-bioem2013/>

⁵ <http://www.itis.ethz.ch/who-we-are/partners/>

⁶ <http://microwavenews.com/news/backissues/m-j03issue.pdf>

⁷ <http://microwavenews.com/news/backissues/n-d02issue.pdf>

All members have for years claimed that there are no health effects below existing guidelines, in line with industry interests. The only exception is Mr. Mild's opinion regarding brain tumour risks from mobile and cordless phone use – but his opinion has not been declared in the report nor documented as a minority opinion.

Most of them, but not all, have also received funding from industry, directly or indirectly. Several of them, like Mr. Leitgeb in the Committee, are members of or experts to ICNIRP (Mr. Mattsson, Mr. Sienkiewicz, Mr. Auvinen and Mrs. Scarfi).

Mats-Olov Mattsson, former chairman of SCENIHR 2009, and present member of ICNIRP, is advisor to **TeliaSonera**, the major telecommunications operator in Sweden and Finland. Mr. Mattsson claims he is an unpaid advisor to TeliaSonera. This is difficult to believe in view of the company's annual net income of 15,599 million SEK and taking into account the fact that Mr. Mild, who is also an advisor to TeliaSonera, is paid for the same service. Mr. Mattsson is employed by AIT in Austria which is **49,5% owned by the Austrian Federation of Industries, a conflict of interest that Mr. Mattsson failed to declare in his declaration of interests.** (Mr. Mattsson only mentioned ownership by the Austrian state (50,5%).) **AIT is intensively involved in wireless and energy solutions and has an objective of being a "major partner for private and public sector businesses".**⁸ His employment at AIT therefore constitutes a clear conflict of interest.

In addition there are more noteworthy conflicts of interest in the SCENHIR EMF expert group.

Kjell Hansson-Mild, advisor to **Telia Sonera. (In contrast to Mr Mattsson, Mr Mild does not claim he is unpaid for his advice)**

Zenon Sienkiewicz, ICNIRP, member of management and funding from industry funded research program (MTHR). Advisor **Japan EMF Information Center** emanating from **Japan Electrical Safety & Environment Technology Laboratories** and the **Japan Electric Association**): holds shares in British Telecom

Anssi Auvinen, member ICNIRP and repeatedly funded by MMF, the **Mobile Manufacturers' Forum**³;

Olga Zeni, previous funding from Telecom Italia and CTIA, Italy (wireless industry);

Maria Rosaria Scarfi consulting expert ICNIRP funding from industry (Telecom Italia and CTIA -wireless industry). Member of Cost BM0704 for which IT'IS is grant holder. Member of Italian Electrotechnical Committee on EMF (an Italian standardization organization);;

Mr James Rubin received research funding from MTHR UK, a research program partly funded by the telecommunication industry (Mobile Manufacturers Forum, MMF);

Mr Joachim Schüz participate in cohort study (Cosmos) funded by major telecommunications companies, previously research funding from GSM Association and MMF (Interphone) and EPRI (US Electric Power industry).

⁸ http://www.ait.ac.at/fileadmin/cmc/downloads/Berichte/GBs/AIT_2013_Annual_Financial_Statement.pdf

2. The result: a misleading report on potential health effects from EMF

The biased and misleading outcome of the SCENIHR 2015 report was expected considering the composition of the working group.

A rational assessment of this body of scientific literature would reasonably conclude that:

- A. There is consistent evidence of harm for many possible health effects, considerable reasons for concern, as presented by Bioinitiative group in their 2012 report and in their comment to the Commission on the SCENIHR report 2015^{9,10} and as concluded by 190 EMF scientists in May 2015.¹¹
- B. There is a division among the experts in the field and inconsistencies in the research results. Inconsistencies in research results cannot be used as an argument (as in the SCENIHR opinion) that there is no risk. A growing and significant number of research results invalidate opinions that there are no potential health effects.
- C. There are strong economic interests from the industry concerned, why industry funding of research outcomes and of experts are important to take into consideration and highlight.

The example of the brain tumour risk from mobile phone use

We have thoroughly analysed the section on brain tumour risks from mobile phone use as an example of the quality of the SCENIHR report. The SCENIHR conclusion:

“Overall, the epidemiological studies on mobile phone RF EMF exposure do not show an increased risk of brain tumours. Furthermore, they do not indicate an increased risk for other cancers of the head and neck region. Some studies raised questions regarding an increased risk of glioma and acoustic neuroma in heavy users of mobile phones. The results of cohort and incidence time trend studies do not support an increased risk for glioma while the possibility of an association with acoustic neuroma remains open.”

was only made possible by the following manoeuvres :

- Highlight a few very flawed studies that did not find any risks, without reporting accurately on their shortcomings (the cohort studies)
- Dismiss repeated studies that show increased risks, by others considered to be the most reliable for health risk assessment (IARC and the Italian Supreme court for

⁹ <http://www.bioinitiative.org/>

¹⁰ <http://www.bioinitiative.org/submission-of-comments-on-final-scenihhr-opinion-from-the-bioinitiative-working-group/>

¹¹ <https://www.emfscientist.org/>

- instance)
- Rely heavily on selective brain tumour incidence trend data while burying worrisome increasing brain tumour incidence data.

The following examples illustrate the false and misleading presentation of some key studies claimed to show no increased risk of brain tumours:

Case control study Cefalo The SCENIHR final opinion claims that the Cefalo study shows no increased risks. This is incorrect as, on the contrary, the study indicates increased risk in most analyses and a statistically significant increased risk (+115%) for children with the longest mobile phone subscription.

The report also claims that *"Use of cordless phones showed no increased OR../.. not even in the group of highest cumulative use."* This conclusion is false. The Cefalo study *only included the first three years of cordless phone use*. The risk for children with the highest cumulative use is therefore unknown, a fact that is well known by the author of this section, Mr. Schuz, who is also one of the authors of the Cefalo study. The study was largely funded by a Swiss mobile industry foundation.

Cohort study Frei et al. 2011, Denmark.

This update of a Danish cohort, first published in 2001, reported no increased risks of tumours of the central nervous system, based on some 400 000 mobile phone subscribers whose health were compared to the rest of the Danish population. The study has not actually been maintained. The only parameter of possible exposure is the time that has passed since each individual subscribed the first time.

The study contains so many flaws that it is uninformative as to brain tumour risks from mobile phone use, which must be well known by the author of this section, again Mr. Schuz, since he is also co-author of this cohort. He chose not to mention the disturbing fact that the Danish Cohort contained severe flaws, for instance:

1. It included mobile phone subscribers in Denmark between 1982 and 1995 but **excluded the heaviest users, the 200 000 corporate users of mobile phones**. They were thus treated as if they did not use a mobile phone, and ended up in the control group, the rest of the population supposed to be unexposed. Corporate users were by far the most exposed group. In 1999, an average corporate user in Sweden used a mobile phone for outgoing conversations **six times more** than an average private user.¹²
2. In addition, all users with a subscription that started after 1995 were also excluded and were included in the unexposed control group. The study treated everyone who started to use a cell phone after 1995, as if they had never used one, although the number of cell phone users in Denmark more than doubled between 1995 and 1997.¹³ By the year 2000 there were over 3 million subscriptions in the control group. Those people could have accumulated 7 or 11 years of mobile phone use by

¹² PTS: Svensk Telemarknad 2003. Page 69 and 72. Available online <https://www.pts.se/sv/Dokument/Rapporter/Telefoni/2004/Svensk-telemarknad-2003---PTS-ER-200424/>

¹³ Microwave News: The Danish Cohort Study: The Politics and Economics of Bias, November 3, 2011 <http://microwavenews.com/DanishCohort.html>

the end of 2007, the cut-off date for this *study*. But these potentially heavy users also ended up in the "unexposed" control group.¹⁴

3. All users of cordless/DECT phones, as well as non-subscribers using the mobile phone were also treated as unexposed.

These flaws make the conclusions of the SCENIHR final opinion on the Danish cohort invalid.

Brain tumour incidence time trends

The SCENIHR report claims that the brain tumour incidence trends do not mirror an increased brain tumour risk. This is used in addition to the Danish cohort as the main argument against the repeated case control studies showing all increased brain tumour risks from mobile phone use. Once again SCENIHR has cherry-picked data supporting the no-risk hypothesis and omitted conflicting data.

The SCENIHR report notably relies on combined Nordic statistics, omitting to mention that the Swedish brain tumour registry does not seem to be reliable as the brain tumour incidence is presumably underreported to the Swedish Cancer Registry (Barlow 2009, Åsa Klint, Swedish Cancer Registry, Hardell and Carlberg 2015¹⁵).

Danish cancer statistics contradict the combined Nordic and the Swedish data and the SCENIHR conclusions, but this conflicting data is ignored by the SCENIHR report. The Danish brain tumour trends also strongly contradict the Danish cohort based on the same population. The incidence of tumours in the brain and the central nervous systems in Denmark increased by 41.2% in men and 46.1% in women between 2003 and 2012.

SCENIHR chose to not inform about these worrisome trends. Instead they relied on another study that mixed data from Denmark, Sweden and other Nordic countries.¹⁶ In this way the disturbing Danish statistics were neutralised by the underreported Swedish trends. Co-author: again Dr. Joachim Schüz who must have been aware of the separate Danish data from his close collaboration with Danish Cancer Society. In November 2012 the very same Danish Cancer Society sent out a press release highlighting a worrisome increase in brain tumours in Denmark¹⁷.

According to the [British Medical Journal](#) falsification of data “ranges from fabrication to deceptive selective reporting of findings and omission of conflicting data, or willful suppression and/or distortion of data. . .”. The [US Office of Research Integrity](#) defines falsification as “manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented.”

The above examples show that the SCENIHR report meets the criteria for scientific misconduct or fraud.

¹⁴ <https://betweenrockandhardplace.wordpress.com/2015/04/01/guest-blog-from-mona-nilsson-on-recent-scenihhr-report/>

¹⁵ <http://www.ncbi.nlm.nih.gov/pubmed/25854296>

¹⁶ Deltour et al. 2011: Mobile phone use and incidence of glioma in the Nordic countries 1979-2008: consistency check; *Epidemiology*, 2012 Mar;23(2):301-7. doi: 10.1097/EDE.0b013e3182448295.

¹⁷ <http://microwavenews.com/short-takes-archive/spike-brain-cancer-denmark>

A clear majority of recent scientific papers on mobile phones and head tumours shows that mobile phone use increases the head tumour risk. These studies stand out also in qualitative terms, according to several meta-analyses, including the IARC assessment 2011.

3. NGO demands and suggestions

The SCENIHR published opinion will have a huge impact on Public Health policies and standards. However, it is grossly misleading and thereby a threat to the health of the European citizens. We welcome the recent recommendations⁴ of the European Ombudsman to obtain more balanced expert groups with fewer conflicts of interests. EU citizens and decision-makers will not receive correct information about EMF health risks unless expert assessments are impartial and made as intended: in the interest of public health. The NGOs therefore demand:

1. *An annulment of the SCENIHR report on EMF health risks.*
2. *The appointment of a new balanced, transparent and contradictory expert group without conflicts of interest by an unbiased steering group.*
3. *A new balanced and independent assessment.*
4. *The establishment of a permanent stakeholder committee at DG SANCO, where NGO viewpoints can be truly pronounced and considered in the decision process on EMF policy, legislation, research and expert assessment.*

August 31, 2015

Swedish Radiation Protection Foundation, Sweden, www.stralskyddsstiftelsen.se

Priartem, France, www.priartem.fr

Folkets Strålevern, Norway, www.folkets-stralevern.no

StopUMTS, The Netherlands, www.stopumts.nl

Electrosensibles por el Derecho a la Salud (EDS), Spain, electrosensiblesderechosalud.org/

Plataforma Estatal Contra La Contaminacion ElectroMagnetica (PECCEM), Spain
www.peccem.org

Radiation Research Trust, United Kingdom, www.radiationresearch.org

Mast-Victims, United Kingdom, www.mast-victims.org

Electrosensitives in Finland, Finland, www.sahkoherkat.fi

The Swedish Association for the Electrohypersensitive, Sweden, www.eloverkanslig.org

Beperk de Straling, Belgium, beperk.de.straling@gmail.com

ReteNoelettrosmog, Italia, www.retenoelettrosmogitalia.it

Associazione Medici per l'Ambiente – ISDE, Italy, www.isde.it

A.M.I.C.A, Association for Chronic Toxic and Environmental Injury, Italy, www.infoamica.it

The Irish Doctors Environmental Association (IDEA), Ireland, www.ideaireland.org

The Danish EHS Association - For Electromagnetic Hypersensitives,
Denmark, www.ehsf.dk/ehs-foreningen.htm.

The CAVI Society, United Kingdom, www.cavisoc.org.uk/

Safe Schools Information Technology Alliance, United Kingdom, www.ssita.org.uk

Ärztinnen und Ärzte für eine gesunde Umwelt, Austria, www.aegu.net

Electrosensitivity UK (ES-UK), United Kingdom, www.es-uk.info

Annex 1: SCENIHR experts 2015

Annex 2: SCENIHR 2015 section on mobile phones and head tumour risks

Annex 3: Open Letter to Commissioner Dalli, 2011