



European Economic and Social Committee

TEN/559
Electromagnetic
hypersensitivity

Brussels, 21 January 2015

OPINION
of the
European Economic and Social Committee
on
Electromagnetic hypersensitivity
(own-initiative opinion)

On 10 July 2014, the European Economic and Social Committee decided to draw up an own-initiative opinion, under Rule 29(2) of its Rules of Procedure, on

Electromagnetic hypersensitivity
(own-initiative opinion).

The Section for Transport, Energy, Infrastructure and the Information Society, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 7 January 2015.

At its 504th plenary session, held on 21 and 22 of January 2015 (meeting of 21 January 2015), the European Economic and Social Committee rejected the draft opinion prepared by the section for Transport, Energy, Infrastructure and the Information Society and adopted the following counter-opinion by 136 votes to 110 with 19 abstentions.

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1. **Conclusions and recommendations**

- 1.1 The EESC acknowledges and is concerned about the prevalence of EHS. It is encouraged to note that further substantial research is ongoing to understand the problem and its causes. It also notes that SCENIHR (Preliminary opinion on Potential health effects of exposure to electromagnetic fields (EMF) SCENIHR 29.11.2013 - http://ec.europa.eu/health/scientific_committees/emerging/docs/scenihr_o_041.pdf) has been extensively analysing this issue in recent years and will shortly be completing its latest opinion, having engaged extensively in public consultation.
- 1.2 The EESC understands that the main conclusions of this report will not differ substantially from the preliminary opinion of 2013 which stated "Overall, there is evidence that exposure to radio-frequency fields does not cause symptoms or affect cognitive function in humans. The previous Scientific Committee's opinion concluded that there were no adverse effects on reproduction and development from radiofrequency fields at exposure levels below existing limits. The inclusion of more recent human and animal data does not change that assessment." (Preliminary opinion on Potential health effects of exposure to electromagnetic fields (EMF) SCENIHR 29.11.2013 - http://ec.europa.eu/health/scientific_committees/emerging/docs/scenihr_o_041.pdf).
- 1.3 This SCENIHR preliminary opinion also noted that new evidence, compared to its previous opinion of 2009, adds weight to the conclusion that radiofrequency exposure is not causally

linked to symptoms. It notes that often the belief that the subject is being exposed (when they are not) is sufficient to trigger symptoms.

- 1.4 However, to allay continuing public concern and to uphold the precautionary principle the EESC urges the Commission to continue its work in this area particularly as further research is still needed to accumulate evidence concerning any potential health impact from long-term exposure, for example using a mobile phone for more than 20 years.
- 1.5 There remains the issue of public perception. For some individuals the prevalence of EMF is seen as a threat – in the workplace, to their families and in public spaces. Similar groups are equally concerned over multiple chemical exposure, widespread food intolerance or exposure to particles, fibres or bacteria in the environment. Such individuals need support, not only in dealing with actual illness symptoms but with the concerns they express about modern society.
- 1.6 The Committee notes that EHS sufferers experience real symptoms. Efforts should be made to improve their health conditions with a focus on reducing disability as detailed in Biomedicine and Molecular Biosciences COST Action BM0704 (BMBS COST Action BM0704 Emerging EMF Technologies and Health Risk Management).

2. **Introduction**

- 2.1 The purpose of this opinion is to explore the concerns expressed by groups in civil society about the use and impact of radio-frequency emitting devices used in industrial and domestic equipment and services which depend on wireless communication. This is seen as relevant by those who both suffer from a non-specific range of health problems and have also adopted the term "Electromagnetic hypersensitivity syndrome" (EHS) as a definition and implied cause of their symptoms.

3. **Electromagnetic hypersensitivity as a symptomatic diagnosis of the syndrome**

- 3.1 Unfortunately, from their point of view, the overwhelming medical and scientific opinion is that there is no conclusive evidence to link the wide range of symptoms described as EHS to electromagnetic or radiofrequency exposure (EMF). Thus the World Health Organisation (WHO) states, "All reviews conducted so far have indicated that exposures below the limits recommended in the ICNIRP (1998) EMF guidelines, covering the full frequency range from 0-300 GHz, do not produce any known adverse health effect." (WHO: <http://www.who.int/peh-emf/research/en/>) Nevertheless campaigns by activist bodies in several countries continue to demand greater recognition of the perceived problem and more preventive and remedial action on the intensity and prevalence of sources of EMF. Such bodies regard the lack of action by authorities as being at best complacent or worse as part of a wider conspiracy influenced by government, commercial or foreign interests, who are

unwilling to face up to the extensive adjustments required were "wifi" (or other electrically powered devices) to be moderated or curtailed.

- 3.2 The EU, both before and since the Council Recommendation on the limitation of the exposure of the general public to electromagnetic fields (0 Hz - 300 GHz) (Council Recommendation 1999/519/EC) in 1999 has maintained an active engagement with this topic and has sought the best scientific and medical advice - presented through a series of working groups and the European Commission's Scientific Committee on Emerging Newly Identified Health Risks.(SCENIHR) This has resulted in a steady flow of analysis, position papers and opinions which reflect the seriousness with which this is regarded by the authorities, the medical, research, and scientific communities.
- 3.3 This is not just a European issue. In November 2014 the European Commission hosted the 18th annual Global Coordination of RF Communications on Research and Health Policy Conference which reviewed the extensive global research on this topic. To date, these scientific opinions have not led to a scientific rationale justifying a revision of the exposure limits (basic restrictions and reference levels) of Council Recommendation 1999/519/EC. However, the Commission acknowledges that basic data for evaluating some risks is still limited, especially for long-term, low-level exposure, justifying the need for more research.
- 3.4 EMS sufferers continue to argue that action on their problem, both by Member States and the EU, falls far short of what they believe is necessary. Most public health authorities, however, do not agree (For example the UK National Health Service – see <http://www.nhs.uk/Conditions/Mobile-phone-safety/Pages/QA.aspx#biological-reasons>). The great majority of independent trials to date have found that self-described sufferers from EHS cannot distinguish between exposure to real and false (meaning zero) electromagnetic fields. "Double-blind" experiments suggest that people who report electromagnetic hypersensitivity are unable to detect the presence of electromagnetic fields and are as likely to report ill health following a zero exposure, as they are following exposure to genuine electromagnetic fields (British Medical Journal_332_(7546): 886–889).
- 3.5 However, this is not to deny the reality of EHS-attributed symptoms; clearly many people self-diagnose as suffering from a range of disconnected health problems which they link with electromagnetic fields. The proportion of the population claiming this diagnosis varies considerably between Member States. The World Health Organisation notes that "EHS has no clear diagnostic criteria and there is no scientific basis to link EHS symptoms to EMF exposure. Further, EHS is not a medical diagnosis, nor is it clear that it represents a single medical problem." (WHO: Electromagnetic fields and public health <http://www.who.int/peh-emf/publications/facts/fs296/en/>).
- 3.6 By contrast the thermal impact on the human body of electromagnetic fields has been established for over 100 years and, as noted, EU Council recommendations for electromagnetic fields and international radiation safety standards are in place and under

regular review. At the EU level, the following legal instruments have been adopted in the area of electromagnetic fields:

- Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields¹ is designed to complement national policies for improving health. Its purpose is to create a framework for limiting the general public's exposure to electromagnetic fields, based on the best scientific evidence available and to provide a basis for monitoring the situation.
- Directive 1999/5/EC².
- Directive 2013/35/EU³.
- Directive 2006/95/EC⁴ ensures that the public, including workers, are not exposed to levels beyond those set by the 1999 recommendation.
- Decision No 243/2012/EU⁵ establishing a multiannual radio spectrum policy programme (RSPP).

3.7 With regard to research, the Committee notes that since the year 2000 the European Commission, in addition to its active engagement on this topic, has provided funding of EUR 37 million for research into EMF and mobile phones.

3.8 The EESC has stated its concerns regarding these issues and expressed its support for reducing exposure to non-ionising radiation in opinions published on these rules while they were being prepared. However, sufferers from EHS are characterised by attributing their symptoms to EMF at intensities well below the limits permitted.

Brussels, 21 January 2015.

The President
of the
European Economic and Social Committee

Henri Malosse

1 [OJ L 199, 30.7.1999, p. 59-70.](#)

2 Directive of the European Parliament and of the Council of 9 March 1999, [OJ L 91, 7.4.1999, p. 10.](#)

3 Directive of the European Parliament and of the Council of 26 June 2013, [OJ L 179, 29.6.2013, p. 1.](#)

4 Directive of the European Parliament and of the Council of 12 December 2006, [OJ L 374, 27.12.2006, p. 10.](#)

5 Decision of the European Parliament and of the Council of 14 March 2012, [OJ L 81, 21.3.2012, p. 7.](#)