Public Health, including Electromagnetic Hypersensitivity (EHS),

and

the responsibilities of

Local Authorities,
National Parks,
Public Health England (PHE),
Health and Safety Executive (HSE)

and

the Secretary of State for Health and Social Care

Local Authorities have a responsibility for public health, which includes electromagnetic hygiene, despite the inconsistencies of NPPF 2019. To protect against the proven risks of RF radiation, including electrosensitivity, infertility and cancer, Authorities should follow international long-term non-thermal guidelines, and not ICNIRP's unscientific short-term heating guidelines which are not protective.

Health harm from low-level electromagnetic (EM) exposure:

This has been established since the 1930s, with extensive research in Poland, the USA and the USSR in the 1960s, although it is still denied by the UK government and some parts of the wireless industry. The majority scientific viewpoint in the west has accepted low-level EM exposure as harmful for over a decade.

International EMF Scientist Appeal

Two different sets of international EM Guidelines:

*A. Long-term, all biological effects*International biological guidelines, such as <u>Bioinitiative 2012</u>, <u>EUROPAEM EMF Guidelines</u>
<u>2016</u>, <u>IGNIR 2018</u>, or <u>Seletun 2010</u>, protect against:

- (a) long-term health effects above six minutes,
- (b) proven low-level effects, including cancer, electrosensitivity, neurological and cardiovascular harm, and infertility,
- (c) short-term health effects,
- (d) heating effects.
- B. Six minutes, only heating effects

At present (2018) the UK government still bases its advice for the safety of electromagnetic exposure on the 'unscientific' and 'obsolete' 1998 ICNIRP guidelines. These ICNIRP guidelines protect against only:

- (a) short-term health effects limited to six minutes' exposure,
- (b) heating effects, and not cancer, electrosensitivity, neurological and cardiovascular harm, and infertility.



The ICNIRP guidelines state:

"These guidelines are based on short-term, immediate health effects such as stimulation of peripheral nerves and muscles, shocks and burns ... and elevated tissue temperatures resulting from absorption of energy during exposure to EMF" and they do not protect against "long-term effects of exposure, such as an increased risk of cancer".

- The UK government should be giving public health advice based, not on ICNIRP's 1998 short-term guidelines, but on long-term guidelines (A above): e.g. Bioinitiative 2012, EUROPAEM EMF Guidelines 2016, IGNIR 2018, or Seletun 2010.
- The ICNIRP heating guidelines (B above) were condemned as 'obsolete' by the European Parliament in 2011 and 'unscientific' and not protective by the majority-viewpoint scientists in 2018 (EMF Call).
- The ICNIRP guidelines derive from Schwan's mistaken hypothesis of 1953, that the only EM danger is a rise in body temperature of one degree in six minutes. However, this temperature rise is also possible from exercise but without the established risks of cancer, electrosensitivity, neurological and cardiovascular harm, and infertility from low-level EM exposure.
- The <u>ICNIRP</u> in 2002 also accepted the need for long-term guidelines, in addition to its short-term 6-minute guidelines, for some of the general population.
- The chair of ICNIRP has also stated that people should be able to choose longterm biological guidelines if they wish, rather than the ICNIRP's short-term heating guidelines.

Local Authorities' responsibility for improving public health:

- Since 1 April 2013 Local Authorities have had a key new duty: the responsibility for improving public health. This change came under the Health and Social Care Act 2012, which amended the National Health Service Act 2006. Local Authorities must take appropriate steps to improve public health, through an elected cabinet member supported by a director of public health.
- The Secretary of State continues to have overall responsibility for improving health, with national public health functions delegated to Public Health England (PHE).
- The Secretary of State, under the Health and Social Care Act 2012 (11.2A.3), has a new specific duty to protect public health as regards
 - (a) the protection of the public from ionising or non-ionising radiation, and (b) a matter in respect of which the Health and Safety Executive has a function.
- The DHSC therefore delegates this responsibility for non-ionising radiation protection to Local Authorities through the NPPF for the general public, and the HSE for employees.
- PHE provides a <u>Public Health Outcomes Framework</u> (PHOF) for some indicators of the Local Authority's protection against a few public health hazards.

Sarah Heath: "Local authorities' public health responsibilities (England) Standard" House of Commons Library: Heath Section Social Policy Section; Note: SN06844, March 13 2014

National Planning Policy Framework (NPPF) is inconsistent:

- (a) NPPF gives Local Authorities' responsibility for improving public health while
- (b) NPPF requires Local Authorities to expose populations to RF wireless radiation, a class 2B human carcinogen like lead, DDT and diesel fumes, and a proven cause of electrosensitivity and cancers:
 - The National Planning Policy Framework 2019 (NPPF) requires Local (a) **Authorities to prioritise health:**
- § 2: Achieving sustainable development:
 - (8) Two of the three interdependent Overarching Objectives require
 - (b) a Social Objective: to foster "a well-designed and safe built environment ... that ... support communities' health", and
 - (c) an Environmental Objective: to contribute to protecting and enhancing our natural, built and historic environment ... helping to improve biodiversity."
- § 8: Promoting healthy and safe communities:
 - (91) "Planning policies and decisions should aim to achieve healthy, inclusive and safe places":
 - (c) "enable and support healthy lifestyles, especially where this would address identified local health and well-being needs".
 - (92,b) "take into account and support the delivery of local strategies to improve health, social and cultural well-being for all sections of the community" Open space and recreation:
 - (96) "Access to a network of high quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities."
- § 12. Achieving well-designed places
 - (127) Planning policies and decisions should ensure that developments:
 - f) create places ... which promote health and well-being
 - (b) But NPPF 2019 also requires Local Authorities to irradiate the local populations with high levels of RF wireless radiation. This RF radiation is a class 2B human carcinogen like lead, DDT and diesel fumes, and a proven cause of electrosensitivity and cancers.
- § 10. Supporting high quality communications
 - (112) "Planning policies and decisions should support the expansion of electronic communications networks, including next generation mobile technology (such as 5G) and full fibre broadband connections."
 - (116) "Local planning authorities must determine applications on planning grounds only. They should not ... set health safeguards different from the International Commission guidelines for public exposure."

The illogicality of requiring a Local Authority to irradiate its population with a proven cause of electrosensitivity and a toxin classified by IARC as a class 2B human carcinogen is shown by the additional requirement of consulting groups like schools and colleges. If RF radiation were safe, there would be no need for this additional requirement.

(115) "Applications for electronic communications development should be supported by the necessary evidence to justify the proposed development. This should include:



a) the outcome of consultations with organisations with an interest in the proposed development, in particular with the relevant body where a mast is to be installed near a school or college".

This may survive from the Stewart Report of 2000 which, unlike NPPF 2019, took a precautionary approach.

The NPPF 2019 omits the precautionary approach of the Stewart Report and the warning of the chief medical officers of 2011, repeated by PHE from 2017, that children under the age of 16 should not use mobiles except for essential purposes.

France has banned Wifi and mobile phones in schools and nurseries and a growing number of countries now warns about the proven dangers to children and pregnant women, including the Russian National Committee on Non-Ionising Radiation Protection.

The reliance of NPPF 2019 on the ICNIRP 1998 guidelines is scientifically invalid and not protective of health. Instead, NPPF should depend on the international long-term biological guidelines.

- The 1998 ICNIRP short-term heating guidelines prevent only a rise in body temperature of one degree in six minutes (which is also possible from exercise), and not established long-term effects, like cancer, electrosensitivity, neurological and cardiovascular harm, and infertility.
- The 1998 ICNIRP short-term heating guidelines are 'unscientific' according to the majority-viewpoint scientists. They ignore the thousands of studies showing proven harm at under the levels of ICNIRP guidelines, because ICNIRP simply denies and ignores these majority peer-reviewed studies showing long-term non-thermal effects.
- The International EMF Scientist Appeal has some 250 signatories representing the majority-viewpoint scientists who reject the ICNIRP short-term heating guidelines based on Schwan's mistake of 1953. In contrast, the ICNIRP has 14 members, all of whom hold its long invalidated minority viewpoint.
- The international EMF Call represents the majority-viewpoint scientists who call for the replacement of the unscientific 1998 ICNIRP guidelines which are not protective of human health or wildlife, with long-term biological guidelines.
- The US Environmental Protection Agency in 1992 and the ICNIRP in 2002 warned governments that some vulnerable groups in the population are not protected by short-term heating guidelines such as those of ICNIRP. Instead governments need to impose long-term non-thermal guidelines to protect the general population. The UK government has so far (October 2019) not carried out this recommendation by the ICNIRP of 2002.
- The 1998 ICNIRP short-term heating guidelines were condemned as 'obsolete' by the European Parliament in 2011, which called for long-term biological guidelines suitable for people exposed for more than 6 or 30 minutes.
- Planners need international long-term limits like Bioinitiative 2012, EUROPAEM EMF Guidelines 2016, IGNIR 2018, or Seletun 2010.
- International long-term biological guidelines are typically in the range of:

 $0.006 \text{ V/m} (0.1 \,\mu\text{W/m}^2)$,

 $0.02 \text{ V/m} (1 \mu\text{W/m}^2)$,

 $0.06 \text{ V/m} (10 \mu\text{W/m}^2)$

 $0.2 \text{ V/m} (100 \, \mu\text{W/m}^2)$

In comparison ICNIRP's short-term heating guidelines (6 minutes) for 1.8 GHz are: 61 V/m (9,200,000 μW/m²)

with a power density up to 100 million times higher than the international long-term biological guidelines.



Secretary of State and HSE's core duty for health protection:

- The Secretary of State will have the core duty to protect the population's health.
- However, the Government sees local authorities having a critical role at the local level in ensuring that all the relevant organisations locally are putting plans in place to protect the population against the range of threats and hazards.

"Public Health in Local Government: The new public health role of local authorities" (Department of Health, October 2012, Gateway reference: 17876)

Radiation: the Secretary of State's duty as to protection of public health:

Subsection (4) applies in relation to any function under this section which relates to: (a) the protection of the public from ionising or non-ionising radiation, and (b) a matter in respect of which the Health and Safety Executive (HSE) has a function. (4) In exercising the function, the Secretary of State must: (a) consult the Health and Safety Executive and (b) have regard to its policies." (Health and Social Care Act 2012)

HSE: A guide to the Control of Electromagnetic Fields at Work

HSE: The Control of Electromagnetic Fields at Work Regulations 2016 - HSE

Environment Act 1995: "national parks should conserve and enhance wildlife" Under the Environment Act 1995, national parks in England and Wales have as their first purpose: "Conserve and enhance the natural beauty, wildlife and cultural heritage". Environment Act 1995.

An agreement running from July 1 2018 with the UK mobile industry trade body Mobile UK to assist the deployment of mobile network infrastructure appears to be in contravention with their first aim if it is based on ICNIRP's six-minute heating limit and not long-term effects which are clearly the ones relevant to wildlife and local fauna.

Local authority action on nuisances and environmental pollution:

"If you are not able to resolve a nuisance problem yourself, contact your local authority Environmental Health Department. They must investigate your complaint, and you should ask for details about how they will do this. They must take action on your behalf if they believe a statutory nuisance is occurring, or likely to occur or recur. Section 79 of the Environmental Protection Act says they must take "such steps as are reasonably practicable" to investigate your complaint. If the nuisance continues, an Environmental Health Officer (EHO) or Technical Officer may well visit."

Environmental Protection UK (National charity on air, land and noise pollution) "'Pollution of the environment' means pollution of the environment due to the release (into the environmental medium) from any process of substances which are capable of causing harm to man or any other living organisms supported by the environment"

Environmental Protection Act 1990

WHO's IARC: EM exposure is a 2B human carcinogen; experts say it should be reclassified as class 1

Since 2001 and 2011 both ELF and RF EM exposure has been classified by the WHO's IARC as a class 2B possible human carcinogen. Leading international experts, including IARC advisers, now say that further human and animal evidence requires that it should be reclassified as a class 1 certain human carcinogen. This includes EM exposures from Wifi, mobile phones, 5G and mobile phone masts.



In addition it has been established for many decades that low-level EM exposure can cause neurological harm, including electromagnetic hypersensitivity (EHS), cardiovascular harm and infertility.

- ES-UK Selected Studies on Electrosensitivity (ES) and Electromagnetic hypersensitivity (EHS)
- IARC Classifies radiofrequency electromagnetic fields as possibly carcinogenic to humans
- Cancer Expert Declares Cell Phone and Wireless Radiation as Carcinogenic to Humans (2017)
- Pall ML: "Wi-Fi is an important threat to human health" Environ Res. (2018) Environ Res. Article.

Safeguarding children in schools and at home:

Schools and parents have a responsibility for the safeguarding of all the children for whom they are responsible, both at school and at home. This includes safeguarding them against any EM exposures above international long-term guidelines. Moderate EHS affects 3.1-3.8% of people; in comparison, nut allergies affect 1.1-1.6% of children.

Department of Education: "Safeguarding disabled children: Practice guidance" (2009)

Stewart Report (2000)

- "the gaps in knowledge are sufficient to justify a precautionary approach" (1.19)
- "We recommend that for all base stations, including those with masts under 15 m, permitted development rights for their erection be revoked and that the siting of all new base stations should be subject to the normal planning process" (1.36)
- "We recommend that a national database be set up by Government giving details of all base stations and their emissions." (1.39)
- "We recommend, in relation to macrocell base stations sited within school grounds, that the beam of greatest intensity should not fall on any part of the school grounds or buildings without agreement from the school and parents. Similar considerations should apply to macrocell base stations sited near to school grounds." (1.42)

Stewart Report, Conclusions

ICNIRP's guidelines are 'unscientific' and 'not protective' of human health

The small clique of regulators, nearly all of whom hold the same minority viewpoint, e.g. the UK government, Public Health England (PHE), the ICNIRP and the WHO (which has been controlled by the IAEA on all radiation since 1959) and its EMF Project, provides outdated and unscientific advice based on Schwan's mistake of 1953. This approach helps the wireless industry. Most of their publications are outdated and not peerreviewed. The UK government still relies on AGNIR 2012 even though this has been shown to be 'inaccurate' and 'unsafe'. Some members of this minority clique have conflicts of interest, both setting heating-only guidelines, which originate from the wireless industry, and then assessing and recommending the same guidelines to governments. The WHO statements on EM harm and EHS are not peer-reviewed and regarded by experts in this field as flawed, outdated and invalidated.

> Hardell L: "World Health Organization, radiofrequency radiation and health - a hard nut to crack (Review)" (Int J Oncology, 2017)

> Starkey SJ: "Inaccurate official assessment of radiofrequency safety by the Advisory Group on Non-ionising Radiation" (Rev Environ Health, 2016) EMF Call

International EMF Scientist Appeal



Corporate Manslaughter and Corporate Homicide Act 2007

Groups knowingly allowing the public to be exposed to toxic substances which cause death may come under the Corporate Manslaughter and Corporate Homicide Act 2007. "an organisation is guilty of the offence if the way in which its activities are managed or organised causes a death and amounts to a gross breach of a relevant duty of care to the deceased"

> Corporate Manslaughter and Corporate Homicide Act 2007 "Grenfell Tower: Corporate manslaughter considered by police" BBC News, July 27 2017

Gross Negligence Manslaughter

This is where the death is a result of a grossly negligent (though otherwise lawful) act or omission on the part of the defendant. The Adomako Test (1994) involves:

- a) the existence of a duty of care to the deceased;
- b) a breach of that duty of care which;
- c) causes (or significantly contributes) to the death of the victim; and
- d) the breach should be characterised as gross negligence, and therefore a crime.

Gross Negligence Manslaughter

The ICNIRP guidelines concern only six minutes' exposure, whereas Wifi routers and mobile phone masts transmit for more than six minutes, meaning that the public is not protected. Instead local authorities and other responsible agents should be using international long-term guidelines which aim to ensure safety for more than six minutes.

Common Assault (s39 Criminal Justice Act 1988)

An offence of Common Assault is committed when a person either assaults another person or commits a battery. An assault is committed when a person intentionally or recklessly causes another to apprehend the immediate infliction of unlawful force. A battery is committed when a person intentionally or recklessly applies unlawful force to another. Most Local Authority planners are aware of the dangers of RF wireless radiation through NPPF and the relevant international guidelines, both short-term heating and long-term biological.

Criminal Justice Act 1988

5G proven harm

- There are well known serious flaws in the claims by the WHO and ICNIRP as regards the established dangers of radiation already used for 5G and proposed for later 5G.
- 5G radiation at present has the known dangers of 3G and 4G, such as causing the proven symptoms of electrosensitivity, including neurological and cardiovascular harm, infertility and cancers.
- 5G radiation planned for millimetre waves will have the same dangers as proven in its use in electronic warfare and for some crowd control weapons.
- There are particular dangers for hot-spots with intersecting beams and the phased array concentration of radiation.
- Damage to the eyes and retinas is a major risk, unless looking towards a hand-held transmitter or base station, even if concealed from sight, can be prevented.
- The proximity of transmitters sited on lamp posts near bedroom windows for uploading and down-streaming is a particular concern for unprotected sleeping humans, especially children, pregnant women, the sick, the elderly, those with



electrosensitivity or chronic immune conditions where about 90% react adversely to low-level RF radiation. These sensitive groups are already well established, with international long-term biological guidelines warning about them specifically.

- Since 2012 international long-term biological guidelines have provided regulatory frameworks for Local Authorities to provide for the protection of sensitive people.
- There are already reports that hand-held 5G transmitters are unlikely to meet longterm biological guidelines or even short-term heating guidelines unless there is a mechanism to cut off radiation in proximity to the human body.

5G Appeal to halt 5G

Stop 5G on Earth and in Space (International Appeal, over 150,000 signatories) Serious flaws in the WHO's and ICNIRP's claims on 5G and RF wireless radiation (2019) RF and ELF Biological Effects. Majority and Minority Viewpoints and Guidelines (2019)

> Michael Bevington October 2019