

Electrosensitivity UK
Response to Ofcom consultation
June 9 2021

Question 11

The proposals outlined in this technical consultation build upon the principles that the government has established to enable the deployment of 5G and extending mobile coverage, and have been considered under [section 149 of the Equality Act 2010](#). Considering the technical detail of the proposals, we would welcome views on the potential impact of the matters raised in this consultation on people with protected characteristics as defined in section 149 of the Equality Act 2010?

1. Ofcom would knowingly inflict more suffering on 800,000 people with protected characteristics by allowing more mobile phone masts and extending electromagnetic radiation coverage

1.1 By allowing more mobile phone masts and extending electromagnetic radiation coverage Ofcom is knowingly increasing the suffering already experienced by the estimated 800,000 people in the UK (1.2%) who are severely disabled by the very high levels of electromagnetic radiation already allowed by Ofcom. These people have protected characteristics as defined in section 149 of the Equality Act 2010.

1.2 The established symptoms caused by more mobile phone masts and extending electromagnetic radiation coverage for people with this protected characteristic will include typical electrosensitivity symptoms such as severely disabling ill health, infertility, cancers, and neurological and cardiovascular illnesses.

1.3 The established adverse social effects of more mobile phone masts and extending electromagnetic radiation coverage for people with this protected characteristic include the loss of jobs, loss of homes, loss of friends and family and even loss of life. Many people severely disabled by mobile phone mast and similar radiation cannot live near such a source or even move or travel along streets with such masts or people using devices to contact such masts. Where such a mast beams straight into a house or flat or workplace, even from half a mile away, it can make it impossible for such a person to live or work on that side of the property. Increasing numbers of people have been made so severely disabled by Ofcom's failure to protect them that they have little or no genuine quality of life left. They have to escape to wild places without mobile phone mast radiation if they can still find such a place, and suffer increasing ill health and loss of job, income, family, social life and equal opportunities. Ofcom's denial of their

protection has effectively dehumanised these estimated 800,000 people and the PHSO and other parts of government have so far found no way to help them recover their dignity, life, health, hope and equal opportunities with the rest of the population.

1.4 Ofcom is also failing to comply with the recommendation of the Parliamentary Assembly of the Council of Europe in 2011 that governments should provide zones free of electromagnetic radiation coverage and mobile phone masts for these 800,000 people who have protected characteristics.

1.5 Ofcom is also failing to comply with the recommendations of PHE/ICNIRP, which it claims to follow. Under its general principles (2002) ICNIRP requires that each government should adopt non-thermal guidelines below its thermal guidelines in order to protect the vulnerable people in that country, who have protected characteristics and are functionally disabled by mobile phone masts and similar radiation at non-thermal levels.

1.6 Ofcom has been frequently told by experts and sufferers, including through its consultations, of the established health problems of people with electrosensitivity and similar protected characteristics. It has yet to take appropriate action to remediate the ill health caused by its choice of PHE/ICNIRP advice for short-term heating-only guidelines.

2. Ofcom knowingly inflicting radiation at levels harmful to people with protected characteristics under PHE/INCIRP's short-term thermal limits

2.1 By allowing more mobile phone masts and extending electromagnetic radiation coverage under PHE/INCIRP's short-term thermal limits, Ofcom is knowingly choosing to harm the people who have the protected characteristics as defined in section 149 of the Equality Act 2010, as explained in section 1. The tables below show how Ofcom's current PHE/ICNIRP levels are a minority viewpoint, unscientific and unprotective of people with the protected characteristics of electrosensitivity.

2.2 Ofcom's current PHE/ICNIRP levels are recognised by mainstream scientists as unprotective of the 800,000 people who are severely disabled by mobile phone mast and similar radiation and have protected characteristics as defined in section 149 of the Equality Act 2010. A recent paper by Prof. Hardell et al shows how none of the PHE/ICNIRP clique belong to the majority viewpoint supporting the mainstream scientific evidence established since the 1930s (Hardell L et al.: "Aspects on the International Commission on Non-Ionizing Radiation Protection (ICNIRP) 2020 Guidelines on Radiofrequency Radiation" *J Cancer Sci Clin Ther.* (2021) [Article](#))

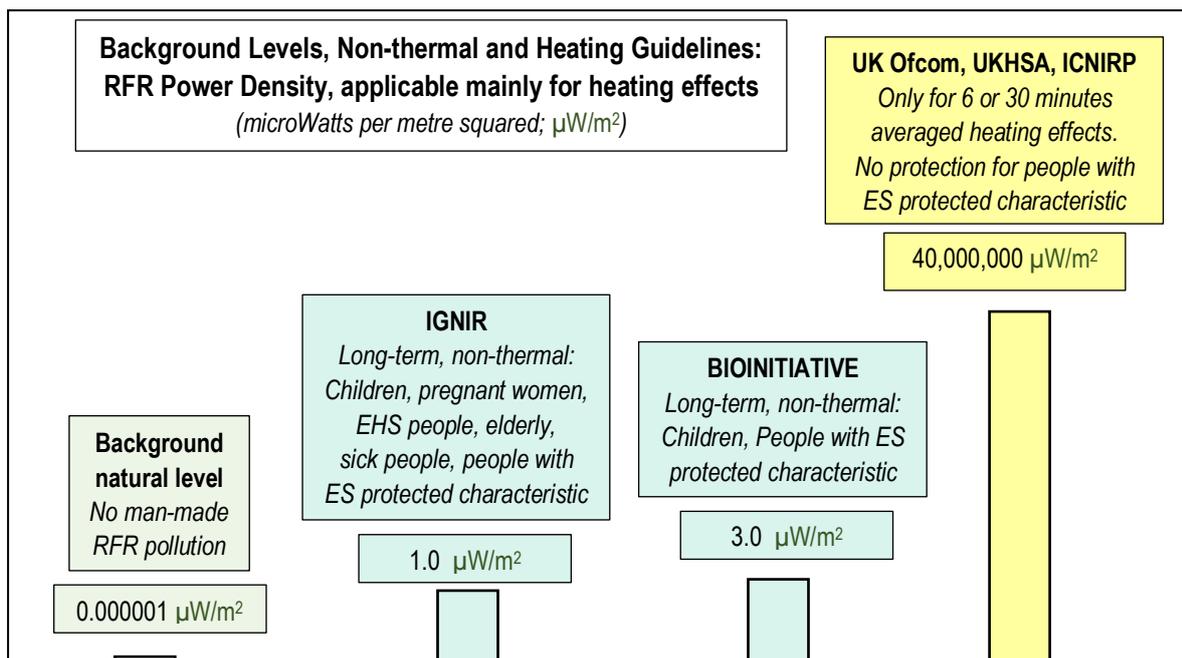
2.3 Three Appeal Court judges in the USA in January 2021 'hammered' the FCC, like PHE/ICNIRP/Ofcom choosing which guidelines to adopt, for still not accepting mainstream non-thermal effects from mobile phone mast and similar radiation such as

those which severely disable the estimated 1.2% of the population with this protected characteristic.

2.4 The tables below show how Ofcom is currently operating outside the parameters of mainstream scientific evidence and has adopted PHE/ICNIRP arbitrary and unscientific denial of the primary health effects of electromagnetic radiation as established from the 1930s. The first guidelines in the 1930s were non-thermal. The type of arbitrary limits still used by PHE/ICNIRP was a mistake by Schwan in 1953. They were invalid and unscientific then, and recognised as purely arbitrary by the US regulators, and although many countries have followed the science and adopted non-thermal guidelines, the UK still follows the US in its adoption of unscientific and unsafe limits. These fail to ensure the safety of people with a protected characteristic such as electrosensitivity.

2.5 In 2008 the European Union Parliament voted overwhelmingly against ICNIRP guidelines because they were outdated and did not include non-thermal effects.

Background Level, Non-thermal and Heating Guidelines: Electric Fields, applicable to all health effects (Volts per metre; V/m)						
Back-ground (safe) levels	Mainstream scientific guidelines			Minority unscientific guidelines		
	<i>Long-term and short-term</i>			<i>Short-term only</i>		
	<i>Non-thermal and heating</i>			<i>Heating only</i>		
	<i>Peak and averaged</i>			<i>Averaged over 6 or 30 minutes</i>		
	<i>Origin: majority scientific evidence</i>			<i>Origin: Schwan's arbitrary claim of 1953</i>		
	<i>Protection against EHS and Cancers</i>			<i>No protection against EHS and Cancers</i>		
	<i>Protection of protected characteristic</i>			<i>No protection of protected characteristic</i>		
V/m	Date		V/m	Date		V/m
0.000001	2018	IGNIR	*0.02 - <0.002	2020	ICNIRP	134
<i>*Children, pregnant women, people with electromagnetic hypersensitivity, the elderly, the sick</i>						



3. Ofcom's October 2020 statement failed to recognise that PHE/ICNIRP's views are unscientific and unprotective and therefore Ofcom fails to adopt a scientific and protective approach to people with protected characteristics

3.1 Ofcom's October 2020 statement in response to the 2019 consultation failed to address the issue that any advice Ofcom takes from PHE/UKHSA is per se unscientific and compromised because of its dependency on ICNIRP. PHE has always had, and still has, employees who are members and advisers of ICNIRP.

3.2 ICNIRP was set up as a wireless radiation industry 'front' in 1992 to protect the interests of the wireless industry and still accepts only Schwan's invalidated thermal hypothesis from 1953. It still rejects the majority and mainstream scientific evidence of the priority of non-thermal RFR effects shown since the 1930s. It still only accepts as its members people who hold its minority viewpoint and arbitrarily deny the rights of people with the protected characteristic of electrosensitivity.

3.3 PHE's advice is necessarily unscientific because it follows ICNIRP and WHO are legally subservient to radiation industry. ICNIRP was required to reject the mainstream science accepting non-thermal effects because, although it is a private German organisation, it was recognised by the World Health Organisation (WHO) as its agency for setting guidelines. However, the WHO signed a legal agreement handing over all responsibility over radiation to the radiation industry in 1959 to fulfil the United Nations' requirement that the WHO maximise and prioritise industrial development, including that of the radiation industry, over the requirements of health and safety.

3.4 As a result, PHE/ICNIRP are required to claim that the many thousands of peer-reviewed studies showing non-thermal health effects are all wrong. The only health effect they arbitrarily accept is heating of one degree within 6 or 30 minutes, even though this does not cause cancer, electrosensitivity, neurological illnesses, cardiovascular illnesses, diabetes and all the other conditions now seen as related to exposure to mobile phone mast and similar radiation. They therefore accept that their short-term thermal-only guidelines cannot protect people with protected characteristics like electrosensitivity or symptoms like cancer, since they state categorically that their guidelines are thermal, not non-thermal.¹

¹ - "these [ICNIRP 2020] guidelines restrict radiofrequency EMF exposure to limit temperature rise" p.487.
- "body core temperature rise due to radiofrequency EMFs that results in harm is only seen where temperature increases more than +1°C" p.488.
- "ICNIRP has adopted a conservative temperature rise value as the operational adverse health effect threshold (the 1°C rise of ACGIH 2017)" p.488.

4. PHE/ICNIRP follow the WHO's legal subservience to the radiation industry and therefore are required to claim incorrectly that electrosensitivity is the same as electrophobia and therefore claim wrongly that electrosensitivity is not a protected characteristic

4.1 PHE/ICNIRP is required to deny the existence of real electrosensitivity, although it has been known since 1733, and is instead required to pretend that only electrophobia exists. They thereby deny the majority science because they operate with the WHO which is legally obliged to follow the radiation industry. The radiation industry requires this denial from WHO and therefore from PHE/ICNIRP, and thus they all deny, against the mainstream evidence since 1733, the existence of people with the protected characteristic of electrosensitivity.

4.2 Even if PHE/ICNIRP wrongly claim that real electrosensitivity does not exist, people with electrophobia still have a protected characteristics as defined in section 149 of the Equality Act 2010. The Equality Act accepts that psychological beliefs like PHE/ICNIRP's electrophobia or IEI-EMF can lead to long-term functional disability, just as real physiological electrosensitivity causes long term functional disability.

4.3 Even if PHE/ICNIRP wrongly claim that real electrosensitivity does not exist, mainstream science accepts that real electrosensitivity does exist. Not even PHE/ICNIRP, nor Ofcom, can undo established mainstream science since 1733. In fact, it was a Fellow of the Royal Society in London who in 1746 first published evidence of electro-hypersensitivity. Neither PHE/ICNIRP nor Ofcom has yet proved that his evidence and that of thousands of scientists since 1746 is wrong or invalid. Instead PHE/ICNIRP, rather than denying this evidence, simply claim that they themselves do not find it 'convincing' or 'consistent' according to their definitions of these words, even if mainstream science has long been sufficiently convinced and found consistency.

4.4 PHE/ICNIRP still follow the unscientific conflation made by the industry front of WHO EMF Project/ICNIRP in 2005 that the two separate conditions of Electrophobia or IEI-EMF, known since 1903, and Electrosensitivity, known since 1733, are the same. No serious scientist believes that a psychological condition is the same as a physiological intolerance. In fact the WHO EMF Project/ICNIRP accepts that Electrosensitivity is a physiological environmental intolerance (EI) but denies a link with its physiological cause established since 1733. It does so by its notorious cherry-picking of a few studies paid for by the wireless radiation industry and government some 15 years ago which deliberately failed to find a link.

4.5 The same pretended psychological explanation used by the wireless industry and government to claim electrosensitivity is really electrophobia was also used by some public health officials for the physical effects of the Camelford aluminium water

poisoning. After diagnosing dementia and death from the aluminium poisoning evident by physiological damage to the brain, the coroner in 2012 called for prosecutions in the light of these denials. Electrosensitivity as a protected characteristic has similar proof now available, in that 3d fMRI scans and doppler cerebral blood perfusion scans can show brain damage in people with this protected characteristic.

4.6 This type of objective evidence, from 3d fMRI scans showing physiological damage from EMF exposures, led the US government report of December 2020 to conclude that its diplomats had been harmed by microwave attacks, causing the specific symptoms established since 1733. These US diplomats would therefore also be considered as people with this protected characteristic as regards avoiding further exposures which would exacerbate their physiological condition.

4.7 PHE, like ICNIRP, has no experts on electrosensitivity because employees of PHE have been required by the government to deny the existence of all established non-thermal effects, even if the scientific evidence is mainstream and overwhelming. PHE employees like other ICNIRP members therefore cannot say whether or not electrosensitivity counts as a protected characteristic because they are first required to deny the existence of electrosensitivity because electrosensitivity is a non-thermal long-term effect. This also applies to their and ICNIRP's denial of a link with cancer which is another symptom of exposure to mobile phone mast and similar radiation but at long-term non-thermal levels. PHE/ICNIRP follow others in their pro-wireless clique in having no experts on real electrosensitivity on the grounds that it does not exist. The leader of the WHO EMF Project, another radiation industry 'front', is a trained electrical engineer rather than a medical physician or biological research scientist as might be expected from someone advising the WHO on the health effects of electrosensitivity.

5. Ofcom has a duty of care to protect all UK citizens, and not to harm them with a known and established carcinogen, in addition to its requirement to adhere to the provision of the 2010 Equality Act

5.1 Ofcom has a duty of care to all UK citizens, to protect their welfare and ensure their health and safety. Ofcom is not legally required to believe PHE/ICNIRP's minority and scientifically invalidated claims. Even if PHE/INCIRP members disseminate incorrect information by claiming that RFR is 'safe', ignoring the majority scientific evidence and the WHO/IARC's classification of mobile phone mast radiation in 2011 as carcinogenic, it still remains true that RFR has been known to cause cancer since 1953 and this has been proved and confirmed in many studies since then. Thus the \$30 million NTP study requested by the FDA to see if mobile phone radiation causes cancer found 'clear evidence', its highest rating, that mobile phone radiation does cause cancer.

5.2 All UK citizens have the basic human right not to be knowingly harmed by being unwillingly subjected mobile phone radiation. They have up to a ten times higher risk of developing cancer from long-term exposure at levels under PHE/ICNIRP's thermal limits if they live within 500 metres of a mobile phone mast. An employer, or landowner of the premises on which this emission of radiation takes place, denying this basic right to health and safety appears to contravene the Health & Safety 1974 Act in addition to the Equality Act for those with protected characteristics.

5.3 The ICNIRP short-term heating guidelines, which Ofcom was wrongly told to adopt instead of the appropriate long-term non-thermal guidelines, categorically state that they protect against only thermal effects, not against long-term effects such as cancers and electrosensitivity, thus contravening the rights of people with protected characteristics. The courts in the UK, since 2012, have recognised functional disability caused by exposure to radiation such as that from mobile phone masts. Ofcom should not deny such people the protection the courts have given. Nor should Ofcom require each of the 800,000 people severely disabled by mobile phone and similar radiation to take out a court case, if they can afford to do so or have the capacity to do so given their often incapacitated state, to protect their supposedly protected characteristic.

5.4 In addition, since 2012, people have been diagnosed by NHS doctors and consultants as having this protected characteristic of electrosensitivity. Ofcom admits it lacks medical expertise, so it should not deny what doctors and consultants diagnose.

5.5 PHE/ICNIRP still denies all health affects below an increase in temperature of one degree within 6 or 30 minutes because it is required to do so under the WHO 1959 legal agreement with the radiation industry. This unscientific denial by PHE/ICNIRP of the mainstream science and the viewpoint of the majority scientists means that PHE/ICNIRP are required to deny the following established effects.

5.6 PHE/ICNIRP's denial of non-thermal health effects also requires the denial that RFR below heating levels can have beneficial health benefits, as used daily in millions of procedures in hospitals across the world, and the denial that RFR below heating levels has been used by the military and others in warfare and hostile engagements, as has been the case since 1953. Even the US DARPA openly admits that it is studying real adverse electrosensitivity symptoms in its aircrew, not PHE/ICNIRP's psychological electrophobia. The US government report of December 2020 stated that its diplomats were attacked by microwave weapons causing the specific symptoms of electrosensitivity and categorically confirmed that the resultant harm is not a psychological condition but physiological. This is counter to PHE/ICNIRP's 2005 attempt to conflate electrophobia with the protected characteristic of real electrosensitivity, even though long-term functional disability from electrophobia also counts as a protected characteristic.

6. Ofcom has a duty to ensure that people with protected characteristics are properly provided for, given that insurers refuse to underwrite mobile phone mast risks except as a high category like asbestos and other carcinogens

6.1 Since the 1990s, insurers have refused to underwrite mobile phone mast risks except as high category like asbestos and other carcinogens. If society restricts asbestos for all humans, then it is logical also to restrict other carcinogens such as mobile phone mast radiation to safe levels rather than PHE/ICNIRP's unsafe and unscientific guidelines.

6.2 This would help Ofcom to allow people with people with protected characteristics as regards their allergy to phone mast radiation to be assured that Ofcom is aware of its obligation under the Equality Act in relation to insurers and people who suffer from electrosensitivity.

7. Ofcom's responsibility is not to cause, continue or exacerbate electrosensitivity symptoms for people with this protected characteristic

7.1 In the UK and other countries, since 2012, employers have been fined for allowing high levels of electromagnetic radiation or delaying its removal.

7.2 The reasons given by the judges is that failing to remove or being slow to remove electromagnetic radiation causes, continues or exacerbates the symptoms which a person with a protected characteristic like electrosensitivity can suffer.

8. Ofcom and local authorities should accept people with the protected characteristic of electrosensitivity as interested parties in decisions on the siting of mobile phone masts

8.2 UK local authorities are required to improve public health, not impair it. They should be alerted to the protected characteristics of people with electrosensitivity.

8.2 An appeal judgement in a European Union state considered that a person with a protected characteristic like electrosensitivity is an interested party in all decisions over the erection and deployment of a mobile phone mast. In this case the person concerned lived over 350 metres away from the mast and was not in direct line of sight of it.

8.3 Ofcom should follow this example as best practice for all people with a protected characteristic like electrosensitivity and involve them as interested parties in the siting and location of all mobile phone masts.

M Bevington
Chair of Trustees,
Electrosensitivity UK.
June 10 2021