

The Committee has chosen to publish material submitted to its inquiry into broadband and 5G. Publication does not indicate any endorsement of the views expressed or validate any claims within that material.

You can read about our inquiry here: <https://committees.parliament.uk/work/89/broadband-and-the-road-to-5g/publications/>

Full Fact have published information about 5G conspiracies: <https://fullfact.org/online/5g-and-coronavirus-conspiracy-theories-came/>

You can find out how to spot false information online here: <https://sharechecklist.gov.uk/>

Written Evidence submitted by Gillian Jamieson

I am a member of the public and do not represent any organisation. My motivation for writing originates in my personal experience of ill health and the death from motor neurone disease of 2 neighbours who lived a few meters from a mobile phone tower in Bembridge, next to which I also lived from 2004 to 2007. This has led me to investigate further.

Briefly, I believe wireless radiation from sources such as mobile phone towers, WIFI routers, cordless phones, induction hobs, SMART meters and other SMART technology is harmful to all health, and that 5G will be much more harmful. I believe that I should have choice as to whether I am irradiated or not. At present, I have little choice if I leave my house, especially on public transport, at theatres or crowded places. My symptoms of fibromyalgia, tinnitus, tingling in the feet, chronic infections and chronic fatigue all worsen when I am irradiated.

Scope of my response:

- The limits of the terms of reference for this call for evidence
- The Government's stance on possible health effects and problems with this
- Alternative stances and research showing adverse health effects
- The stance of the regulatory bodies
- Influence of the telecoms industry on regulatory bodies
- A perspective from consumers who cannot tolerate wireless radiation.

Terms of reference

There appears to be an underlying assumption that the only task of government is to overcome obstacles to the fastest possible roll-out of fibre broadband which will link to a 5G mobile network. There is also an implicit assumption that there are and will not be any adverse health effects from increasing irradiation. There is no sense that the public might disagree or want choice as to whether to be irradiated or not, or that they have any rights not to be irradiated. There is reference to consumer and business attitudes to digital connectivity, without acknowledging that the thirst for the latter might be fuelled by the repeated statements by government that there are no health risks associated with wireless radiation. If people knew of the health risks, now well documented by many scientists, their

attitude to mobile connectivity might be very different and they might, for example, be concerned to protect their children, who for developmental reasons are more vulnerable.

The Government's stance on possible health effects

In POSTbrief 32, July 2019, public concern about health effects of wireless radiation and 5G is assumed to be taken care of by reference to ICNIRP guidelines, the rubber-stamping of these in the AGNIR 2012 report and to WHO, whose EMR Project is currently reviewing recent research.

I disagree that adverse health effects are only feared by the public, or that they can be brushed off. These concerns are shared by many eminent and specialist scientists as outlined in the letter delivered to the prime minister on 22nd January 2020, signed by 268 scientists: https://www.linkedin.com/pulse/letter-uk-prime-minister-concerning-roll-out-5g-wireless-chris-newton/?fbclid=IwAR2xSleETKrOmfRV1_aygVgimoyNU-NlpD255c7Q44giL84ml7bCPe64MfU

It would be more accurate to say that there is apparent scientific disagreement about this matter and it is of crucial importance that the government listens not only to the regulatory bodies, who to a large extent share the same personnel, but also to independent scientists, because getting this wrong endangers the health of every human being and of the planet.

My observations on the government's stance are: on 27th January 2020, Wera Hobhouse MP asked Matt Warman about the health effects of 5G (during the debate on Huawei and security). She was referred to PHE.

I then made an enquiry to PHE's Committee on Medical Aspects of Radiation in the Environment (COMARE) and on 10 February 2020 I received an email from Dr Emma Petty confirming that COMARE's remit is to "provide independent advice to the UK government on the health effects of natural and man-made radiation – both ionising and non-ionising", but that "COMARE has not previously reported on possible health effects from EMFs (electromagnetic frequencies) and at present there are no requests from government departments for the committee to provide advice on this issue"

Thus at this stage the government was continuing to rely on guidelines set by ICNIRP in 1998 and left unchanged by PHE's (now disbanded) AGNIR committee in 2012. In March 2020 ICNIRP updated the guidelines slightly, though still did not admit any adverse health effects from electromagnetic radiation, despite recent large studies.

In addition, I read in COMARE's July 2019 minutes that "COMARE has not been asked to look at 5G concerns and therefore does not have a 5G strategy". It was also stated regarding the

WHO EMF review “It is a huge piece of work (25,000 studies) and the report is not imminent” and that COMARE would not seek to duplicate its work by reviewing recent studies:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/848089/COMARE_123_minutes.pdf

In COMARE’s November 2019 minutes, questions were raised about “how the Committee would approach the review of the WHO report, when it is released, and what skills were available in the UK to assist with this. The Chair reminded members that a vacancy currently exists on the Committee for a radiation scientist with interest in non-ionising radiation”. In other words, the suggestion seems to be that it is difficult to get properly qualified people. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/872070/COMARE_124_minutes.pdf

In summary, the PHE/COMARE has not provided advice on the health effects wireless radiation because the government has not asked for it and it does not have a 5G strategy, because the government has not asked for it. At present there are insufficient people in the COMARE committee who would be qualified to assess the upcoming WHO EMF Project review. Thus it is abundantly clear that the UK government is not taking responsibility for the health of its people.

Alternative stances and research showing adverse health effects

The letter signed by 268 scientists which was delivered to the Prime Minister 2 months ago was to present the 5G International Space Appeal and the 5G Appeal. This letter states:

“The new 5G standard of wireless communication is focussing minds on the ever growing level of background, pulsed, radio frequency (RF) radiation to which we are all exposed. In light of the burgeoning research showing biological effects of RF radiation at power levels tens to thousands of fold less than those suggested safe by Public Health England (PHE), we consider this situation most alarming.

In particular, we are extremely concerned by the vulnerability of our young and very young people to the harmful effects of pulsed RF radiation. Study upon study is showing that this non-ionising radiation is causing oxidative DNA damage in cellular systems and this may be particularly harmful to the reproductive system of young boys, adolescents and young men.

The 5G Space Appeal has a focus on wireless transmission from satellites launched and installed in low Earth orbit by companies such as SpaceX. The originator of this International Appeal, Arthur Firstenberg, is concerned not only with health effects, but given their position, the effect that power transmission from the satellites will have on the delicate electrical balance of the ionosphere”.

5G Study January 2020

This study suggests that “5G mobile networking technology will affect not only the skin and eyes, but will have adverse systemic effects as well.”

<https://www.sciencedirect.com/science/article/abs/pii/S037842742030028X?via%3Dihub>

However, many studies done up until now relate to already existing radiation, and some information is given below along with links, giving further information

Behind this is the knowledge that we humans, other living beings and the earth all have our own electromagnetic frequencies. When our systems are disturbed by different frequencies to these, we can expect chaos and illness and that is what is gradually emerging through the personal experience of many. Dr Erica Mallery-Blythe is a world expert in electro-sensitivity and estimates that 3% of people experience this and about half of these in a severe form, meaning that even exposure to household electricity creates pain. She thinks about 80% of people are experiencing effects which can include mood problems, sleep problems and fatigue, but that the possible source is unacknowledged. Her presentation is here:

<https://www.radiationresearch.org/articles/dr-erica-mallery-blythe-presentation-impacts-of-exposure-to-electromagnetic-radiation-5g-youtube/>

According to the EMF CALL (emfcall.org), ICNIRP guidelines only protect against acute thermal effects from very short and intense exposure. The guidelines do not protect against harmful effects from low-intensity and long-term exposure, such as cancer, reproductive harm, or effects on the nervous system, although these effects are convincingly shown to appear from chronic exposure at intensities below ICNIRP limits.

The world’s largest study (25 million US dollar) [National Toxicology Program \(NTP\)](#) in 2016, shows statistically significant increase in the incidence of *brain and heart cancer* in animals exposed to EMF below the ICNIRP guidelines. These results support results in [human epidemiological studies](#) on RF radiation and brain tumour risk. _

Another large study from the Ramazzini Institute in 2018 found carcinogenic effects of exposure to RFR generated by base stations of mobile phone on rats and increased incidence of tumors of the brain and heart in RFR-exposed rats. It has made a call for the re-evaluation of IARC conclusions on the carcinogenic potential of RFR in humans.

<https://www.sciencedirect.com/science/article/abs/pii/S0013935118300367?via%3Dihub>

A previous ICNIRP member, James Lin, thinks that wireless radiation from mobiles, 5G, WIFI etc. should be a Class 1 carcinogen. <https://www.emfacts.com/2020/01/former-icnirp-member-advocates-that-wireless-must-get-a-more-stringent-cancer-risk-class/>

Dr Martin Pall’s analysis of problems with international safety guidelines and his listing of studies showing adverse health effects is here: <https://ehtrust.org/wp-content/uploads/SafetyGuidelineFraud2.pdf>

This is a study on risks to children and includes comments on conflicting science:
<https://www.radiationresearch.org/wp-content/uploads/2019/10/On-the-Clear-Evidence-of-the-Risks-to-Children-from-Smartphone-and-WiFi-Radio-Frequency-Radiation-Final-2019.pdf>

Numerous studies are listed here: <https://bioinitiative.org/table-of-contents/> and here: <https://www.radiationresearch.org/category/research/>

The stance of the regulatory bodies

ICNIRP

Despite the large number of studies now showing adverse health effects of electromagnetic radiation, ICNIRP still maintains there are no adverse health effects. They dismiss the results of the 2 largest studies, those from the NTP and the Ramazzini Institute and Ronald L. Melnick Ph.D states that the ICNIRP analysis (dated 4.9.18) of these studies is flawed, stating:

“it contains numerous false and misleading statements, particularly those about the toxicology and carcinogenesis studies on cell phone radiofrequency radiation by the US National Toxicology Program (NTP). This flawed analysis by ICNIRP served as the basis for ICNIRP to support their [conclusion](#) that existing radiofrequency exposure guidelines do not need to be revised despite new evidence showing that exposure to cell phone radiofrequency radiation (RFR) causes cancers in experimental animals. ICNIRP also does not take into account evidence on other harmful effects of cellphone radiation including damage to [brain DNA](#), reduced pup birth weights, and decreased sperm [quality](#)”.

The full critique is here: <https://ehtrust.org/us-scientist-criticizes-icnirps-refusal-to-reassess-cell-phone-radiation-exposure-guidelines-after-us-national-toxicology-program-studies-show-clear-evidence-of-cancer-in-experimental-animals/>

AGNIR

PHE states that it still relies on the AGNIR report of 2012 which supports the 1998 safety exposure guidelines of ICNIRP. AGNIR was disbanded in 2016 shortly after neuroscientist Dr Sarah Starkey pointed out that the AGNIR 2012 report omits and distorts scientific evidence leading to wrong and misleading conclusions. She also points out how many personnel have dual roles/conflicts of interests by being in more than one of these regulatory bodies at the same time. Her analysis is here: <http://phiremedical.org/dr-sarah-starkey-official-advice-radiofrequency-radiation-risk-assessment-adverse-effects-2018/?fbclid=IwAR2I38AbYmZM21Feaw8FZVGWlb2k72uEZj9AsN472dgjhTB5rSOvkcWn51c>

Further detail on the activities of AGNIR is here: <https://truepublica.org.uk/united-kingdom/mobile-phone-cover-up-govt-advisory-body-disbanded-inaccurate-and-misleading-conclusions-remain/>

Influence of the telecoms industry on regulatory bodies

In recent months The Court of Appeal in Turin has made an important judgement on the link between mobile phone usage and an acoustic neuroma. In doing this it recognised that ICNIRP members had conflicts of interest. Here is an excerpt from the judgement:

“Conflicts of interest and the role of the ICNIRP [were] pinpointed by the Tribunal. Indeed, the Tribunal recognizes that telephone industry-funded scientists, or members of the ICNIRP, are less reliable than independent scientists:

“Much of the scientific literature that excludes carcinogenicity from RF exposure, or at least argues that research to the contrary cannot be considered conclusive... is in a position of conflict of interest, which is not always asserted: see, in particular, on page 94 of the report, the Applicant’s defense (not contested by the other party) that the authors of the studies indicated by INAIL, who are mentioned by name, are members of ICNIRP and/or SCENIHR, which have received, directly or indirectly, funding from industry. P. 33.”

The Turin CTU states:

“It is considered that less weight should be given to studies published by authors who have not declared the existence of conflicts of interest. In this case, conflict of interest situations may arise in relation to the assessment of the effect of radio frequencies on health, for example:

1. Cases where the author of the study advised the telephone industry or received funding for studies from the telephone industry, and;
2. If the author himself is a member of the ICNIRP.

The English translation of the judgement summary is here:

https://www.radiationresearch.org/wp-content/uploads/2020/01/Turin-Verdict-ICNIRP_Judgment-SUMMARY-of-the-Turin-Court-of-Appeal-9042019_EN-min.pdf?fbclid=IwAR3gCTkiuVrximqDAiJiiYtvI8caMTnPx9NzpzswBShfvxAYsXxMparh1m8

A current example of conflict of interest

Martin Rössli

In ICNIRP’s March 2020 report, it is stated: “ICNIRP declares no conflict of interest”. However one member of ICNIRP is Martin Rössli. In a letter to the Swiss government from oncologist Leonhard Hardell about Mr Rössli, who is also the Chairman of BERENIS the Swiss advisory expert group on electromagnetic fields and non-ionising radiation, it is stated that

he “has been a member of the board of the telecom funded Swiss FSM organization and he has received funding from the same organization”. It is also stated that his article on salivary gland tumors and mobile phone use is a biased evaluation and concludes:

“It is imperative that the chair and other experts evaluating scientific evidence and assessing health risks from RF radiation do not have such clear conflicts of interests or bias as Martin Rösli has. Indeed, being a member of ICNIRP and being funded by industry directly or through an industry funded foundation, constitutes clear conflicts of interest. Furthermore, it is recommended that the interpretation of results from studies of health effects of radiofrequency radiation should take sponsorship from telecom industry into account”.

The full letter is here: https://www.orwell-news.ch/wp-content/uploads/2020/01/BERENIS_UVEK_January-2020_EN.pdf

The WHO EMF project and telecoms funding

Michael Repacholi was the leader of the WHO department of electromagnetic radiation, the WHO EMF project from 1996 to 2006. He set up a close collaboration between WHO and ICNIRP (being head of both organizations) inviting the electric, telecom and military industries to meetings. He also arranged for large part of the WHO EMF project to be financed by the telecommunication industry's lobbying organisations: GSM Association and Mobile Manufacturers Forum, now called Mobile & Wireless Forum (MWF)

In 2000 he recruited Emilie van Deventer to the WHO EMF Project and she is their current project manager. Van Deventer is an electrical engineer. She has no formal or earlier knowledge in medicine, epidemiology or biology. She has been a long time member of the industry dominated organization Institute of Electrical and Electronics Engineers (IEEE), whose members are or have been employed in companies or organizations that are producers or users of technologies that depend on radiation frequencies, such as power companies, the telecom and the military industry. IEEE has prioritized international lobbying efforts for decades especially aimed at the WHO. For more information see (http://www.ices-emfsafety.org/wp-content/uploads/2016/10/Approved-Minutes-TC95-Jan_16.pdf).

Emilie van Deventer and her team received research funding from the Natural Sciences & Engineering Research Council of Canada (NSERC), Communications & Information Technology Ontario (CITO), and their major industrial partner, Nortel.

The full history of the WHO EMR group and of ICNIRP is here:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5504984/>

Clearly any report from the World Health Organisation is likely to be heavily biased in favour of the telecoms industry, due to their sources of funding and interdependency.

Surely once a government knows this, it could not in all conscience consider following WHO advice or guidelines.

A perspective from consumers who cannot tolerate wireless radiation

I will let this community speak for themselves. Please look at the ES-UK newsletter. It is both depressing and an eye-opener, with a broad range of global news and personal experiences. Please read and listen to these people's voices! It is an important perspective to be aware of.

I would like to highlight one news item on page 26, where children are being deprived of their education because of a 5G phone mast:

"Stronsay's 5G: children home-schooled Some parents are removing their children from Stronsay Junior High, on the island of Stronsay, Orkney, until the BBC 5G phone mast nearby is removed because of the health risk. Russell and Naomi Bremner started home-schooling their three children in April 2019. They have been joined by Duncan and Anna Bliss Davis who say their six children, aged five to 11, will not go back after the summer break. The two families account for 9 of the 29 children in the combined primary and secondary school, on an island of 350 people".

<http://www.es-uk.info/wp-content/uploads/2020/01/ES-UK-Newsletter-Winter-2019-vol.17-no.3.pdf>

Conclusion

I cannot trust the WHO, PHE or ICNIRP to protect my health because they are not independent and because I know that there is enough evidence showing the adverse health effects of wireless/electromagnetic radiation. I am not alone in my beliefs. There is a growing community of people appalled by the prospect of more irradiation including 5G.

I do not want 5G and believe it to be dangerous to all life and the planet. I believe it has not been proved to be safe and that its use will be in contravention of the Nuremberg Code. If there has to be a mobile network, it must be greatly reduced and made safe for all living beings. The public should be told clearly that there are many doubts about its safety, so that they can make an informed choice about their use of technology. For those with electrosensitivity, there must be places to live that are free of electromagnetic radiation of all sorts and they must be able to go into public areas such as transport, leisure facilities and theatres without the fear of being irradiated. They should have the right to a workplace that is also safe for them.

I am satisfied with my home environment, but I had to choose a house that was not within 500 metres of a mobile phone mast, something that is becoming more and more difficult. I do not have a SMART meter, SMART TV or other SMART technology. My internet router is wired, with no WIFI facility, my phones are corded and my laptop has an Ethernet connection, though I had to buy an adapter hub to achieve this. I have no problems with internet connection and it is secure. I have one problem: my bank requires me to have a mobile phone to send me a secure code when I make a new problem online. Much of this is not inconvenient. However, to reduce radiation in my body I have to sleep on a grounding sheet costing £150. I am fortunate I can afford this.

The environment outside my house is a different matter. I feel much worse anywhere near places with WIFI or where others use their mobile phones, ie. in most public places. I believe I have a right not to be irradiated in public places or in my workplace.

The government needs to hold an enquiry as urged to by the 268 scientists behind the letter delivered to the Prime Minister on 22nd January. We need to stop in our tracks, halt further development and put the health of the nation, wildlife and the planet before (short-term) economic gain and do whatever it takes. Presently we see with coronavirus the grave consequences of a health emergency. The increase in illness through wireless radiation will take a heavy toll on all parts of society too, if we do not reconsider our way of living. Perhaps we could ask “what is healthy for us, for our wildlife, birds, insects and soil?” and see where those answers take us, rather than “How can we become world leaders in 5G?”

March 2020