

NOTE FOR CAMDEN COUNCIL

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Executive Summary

1. There are widespread concerns amongst the medical research communities around the world that the current ICNIRP (International Commission on non-Ionizing Radiation Protection) electromagnetic frequency (“ENF”) radiation guidelines are not fit for purpose, in that they only address EMF heating effects, and not the many other potential effects at a cellular or physiological level. The ICNIRP guidelines are the default guidelines used by the UK government and government agencies to set limits on exposure to EMFs.
2. There is already a huge body of work by specialist biochemists, scientists and doctors citing adverse effects on health of prolonged exposure to pulsed high frequency EMF radiation at levels well below the ICNIRP-recommended guideline maxima, and the members of ICNIRP, the EU's SCENHIR and the WHO EMF project, actually represent a minority view amongst scientists and health researchers.
3. This situation should not be exacerbated by the introduction of widespread millimetreWave (mmWave) EMF radiation into the public realm as part of the next stage of 5G rollout, as is currently imminently threatened by DCMS/Ofcom in the UK, until it is definitively proven on an internationally peer-reviewed basis that subjecting the public to potentially ubiquitous and enduring mmWave EMF radiation alongside existing 2G, 3G, 4G, Wi-Fi, Smart Meter, and IoT radiation, will not result in any adverse health consequences.
4. To date, it is understood that there has been no research anywhere specifically addressing the potential biological and health effects of mmWave RF radiation on humans, animals and insects. It is not acceptable for the public to be exposed to large numbers of small cells emitting mmWave radiation in the 26GHz, 40GHz and 66-71GHz bands as part of the next stages of 5G rollout, until sufficient very focussed and appropriate research has been completed, to demonstrate that there are no adverse biological and health effects. Otherwise the government will effectively be treating the general population as live subjects in a UK-wide 'in vivo' experiment on mmWave radiation.
5. This is not acceptable not least because this is a breach of the Nuremburg Code (see further below) and the "Precautionary Principle" must be applied. To do otherwise could expose the NHS to massive costs downstream if there are generalised adverse effects that will then need to be treated by the NHS.
6. It is noteworthy that some Lloyds of London Underwriters are already excluding the potential effects of non-ionising RF radiation from their terms of liability cover, as are Swiss Re.

7. The Department of Health and Social Care, Public Health England and the National Institute for Health Research (NIHR) must urgently work together to define, sponsor and fund the necessary research including international experts independent of any members of the minority-view international bodies, including ICNIRP, SCENHIR and WHO EMF Project. There must be no telecoms industry funding involved. in order to ensure that there are no conflicts of interest.
8. The government has already received in excess of £3.7bn in proceeds from the 4G spectrum auction in 2013 and the 5G first-tranche spectrum auctions by Ofcom in 2018. It would be morally negligent of the DHSC/PHE/NIHR on behalf of the government not to secure funding from the Treasury to use a tiny fraction of these windfall funds to fund this independent research.
9. In the meantime, until widespread use of the mmWave bands is deemed safe for long-term human exposure, based on evidenced and peer-reviewed research, the DHSC must require the Dept. for Culture Media and Sport (DCMS) to ask Ofcom to cease and desist from making any plans to release any portion of the 26GHz band for public 5G use (whether experimental/trial or commercial). Any existing trial use of the 26GHz band for 5G small cells in various UK cities must be strictly time-limited and terminated when feasible pending confirmation that the long-term irradiation of the general population with 26GHz and 40 GHz and 70GHz RF signals is safe.
10. It is incumbent on local councils to protect its constituents where the evidence of safety is equivocal. From the contents of this note, you will see that there is a large body of evidence of harm from EMFs which is being ignored by the ICNIRP and the UK government.
11. I would urge the Council **to suspend the roll out of 5G until such time as the evidence of safety can be assured.**
12. In making its decision, it will be important for the council to understand which of its members on the scrutiny panel have interests or connections to the mobile phone or 5G industry and, therefore, conflicts of interests. It will also be important to ensure that if they use anyone other than councillors to help them with their decision, such persons are not connected to the industry and do not have conflict of interests in this regard.
13. Thank you in advance for your urgent consideration of these potentially alarming public health issues.

This note deals with the following issues:

- (a) What is 5G;
- (b) Why are people concerned about health re 5G;
- (c) What do some doctors say;
- (d) The government and its agencies have washed their hands of health issues;
- (e) So, what are the ICNIRP guidelines and what's wrong with them;
- (f) How do the UK agencies interact with the international agencies and ICNIRP;
- (g) Let's now look at some legal aspects;
- (h) Your obligations as an employer;

- (i) Government consultation on removing planning control from citing of mast and antenna;
- (j) Letter sent by Eric Peel to various government agencies
- (k) My petition which is addressed to all local councils;
- (l) LED street lights are dangerous and, in addition, are wired with 5G already
- (m) Conclusion.

1. What is 5G

14. Simply put, 5G stands for 5th Generation of the telecommunications network. These words describe the different stages of development of the carriage of data over waves. Each generation is an evolution of the network from the previous generation.

15. 1G was the carriage of voice data, 2G brought international roaming, texts and sim cards (the data in bus shelters use 2G), 3G enabled voice, video and internet in a mobile scenario and 4G was the convergence of multimedia (and pretty much everything goes) and technology.

<https://www.quora.com/What-are-the-differences-between-1G-2G-3G-4G-and-5G>

16. So, 5G is a progression from 4G and brings multiple antenna, millimetre wave, small cells, Li-Fi and all the new technologies from the previous decade together which could be used to give 10Gb/s to a user, with an unseen low latency, and allow connections for at least 100 billion devices. Speed of delivery to a device is said to be at least 100 times faster than 4G. You can read about the breakthrough from 4G to 5G at the link below:

<https://www.bbc.co.uk/news/technology-22507512>

17. The debate about 5G has arisen from the fact that it will use a higher frequency of the wave spectrum to deliver its data. The higher the frequency, the bigger the data load which can be carried. 5G is set to use millimeter waves (microwaves which are the same as are used in your microwave oven) to deliver its data load. That's where the problem lies.

18. Of course, its not the whole story because current EMFs from 4G do have health impacts to EHS sufferers but, for the purposes of these submissions, it's the health effects of microwaves in the public space which are my focus.

19. If you have limited time and want a swift way into the issues, I would urge you to watch this video (1 hour but it explains the problem succinctly):

<https://www.youtube.com/watch?v=6M7YFI0I9kl&feature=youtu.be>

and to read the BioInitiative report at:

[https://bioinitiative.org/table-of-contents/.](https://bioinitiative.org/table-of-contents/)

20. Those two media should bring you up to speed with the issues quite quickly.

B. Why are people concerned about health re 5G

21. There are people in the UK and abroad who suffer from the effects of electromagnetic frequencies and are recognized medically to be Electromagnetically Hypersensitive (“EHS”). They suffer a range of symptoms when they come into contact with EMFs including headaches, fatigue, disturbed sleep, tingling, pains in limbs, head or face, stabbing pains, brain-fog and impaired cognitive function, dizziness, tinnitus, nosebleeds, palpitations and others.
22. I have set out in **Schedule 1**, the biological effects at various frequencies set out in the Bioinitiative report <https://bioinitiative.org/table-of-contents/>
23. I have set out in **Schedule 2**, a letter from Dr Andrew Tressider setting out some of the medical symptoms which are experienced by those who suffer from electrosensitivity.
24. Accepted biological effects of EM fields include: increased childhood leukaemia, adverse effects on sperm production, pregnancy, embryo development and hormones; there are links with depression, Motor Neurone and Parkinson’s diseases, several cancers, behavioural problems and cataracts (see **Schedule 2**).
25. Other studies show reduced fertility, neurological damage, DNA damage, cell death (apoptosis), oxidative stress and cardiac effects which are but a few of those recognised by modern scientific studies referred to below. The studies also show significant risks to insect, plant and bird life.
26. Mechanisms include: changes in calcium influx, failure of repair of DNA breaks, blood brain barrier permeability, heat shock protein production, disruption of vital melatonin production (e.g. by blue light from screens), general sympathetic (stress) upregulation of the body and disruption of cell to cell signaling. The overall effect may be to age us all more quickly (see also **Schedule 2**).
27. Below are some stories. One is from a woman in Kentish Town who wrote to me this week. She has consented to her story being circulated. She has corresponded with PHE who has denied any liability or ability to intervene. When 5G was turned on at an antenna 6m from her house, she started suffering the following symptoms which she has not suffered before:
 - a persistent headache;
 - nausea;
 - high levels of anxiety;
 - palpitations;
 - a constant humming sound in my ears;
 - itching skin; and
 - other symptoms which recede when she goes into green wooded spaces.
28. Her note is below:

Hi Jessica,

someone posted your Ham&High letter on Nextdoor, where I came across it. Many thanks for taking the time to write it!

I am now writing to you to share with you our recent personal experience with 5G.

We live in a terraced house in Kentish Town and there is a council block facing the back of it.

In May this year an earlier mobile phone mast installation on the roof of this block was "upgraded" to 5G. I was told at the time that this is the first such installation of 200 planned for Camden alone. I was also told that local engineers have no access to the control panels. In our case the infrastructure or hardware(?) is made and supplied (apparently for free) by Huawei and is being operated remotely by Huawei engineers.

Our bedroom is approx. 5-6 meters away from the public exclusion zone around the two antennas directly facing us.

My first response was to get in touch with the Camden New Journal, write to Public Health England and my MP, Keir Starmer whom I also went to see in person at his surgery. I also sent various FOI requests to the council.

Tom Foot of the CNJ initially seemed very keen to look into the issue and asked me to forward all the communication but has since gone quiet.

All the official respondents are unanimously hiding behind the ICNIRP "guidelines" (I assume you are familiar with who the ICNIRP are?) and PHE more or less confirmed that we are now guineapigs (no adverse effects anticipated, but should the evidence change they'll let us know....).

I alerted PHE to the fact that some tenants of the council block have to walk through the exclusion zone in order to reach their flat and also told them that tree surgeons had been sent into this zone to "reshape" one of two very large trees near the antennas. PHE responded that there should be warning signs and/or cordoned off areas but this is still not the case.

Various big law firms I approached hoping they might be interested in looking into this unprecedented threat to our privacy and health (and theirs!) didn't show any interest either.

Whilst trying to alert others to this issue I also did everything I could to inform myself. An accoustimeter I purchased showed ridiculously high rf readings in our house and garden, especially at night. An emf expert has since confirmed these.

As I began to feel unwell and also utterly unsafe in our home we decided to relocate to Germany for a while and we ended up staying there for nearly three months.

Since our return we have been sleeping under an emf bed canopy and we also brought back a German system which plugs into the electricity circuit of the house and is designed to mitigate the adverse effects of the radiation. These two measures are enabling us to be in our home of twenty years at least for the time being.

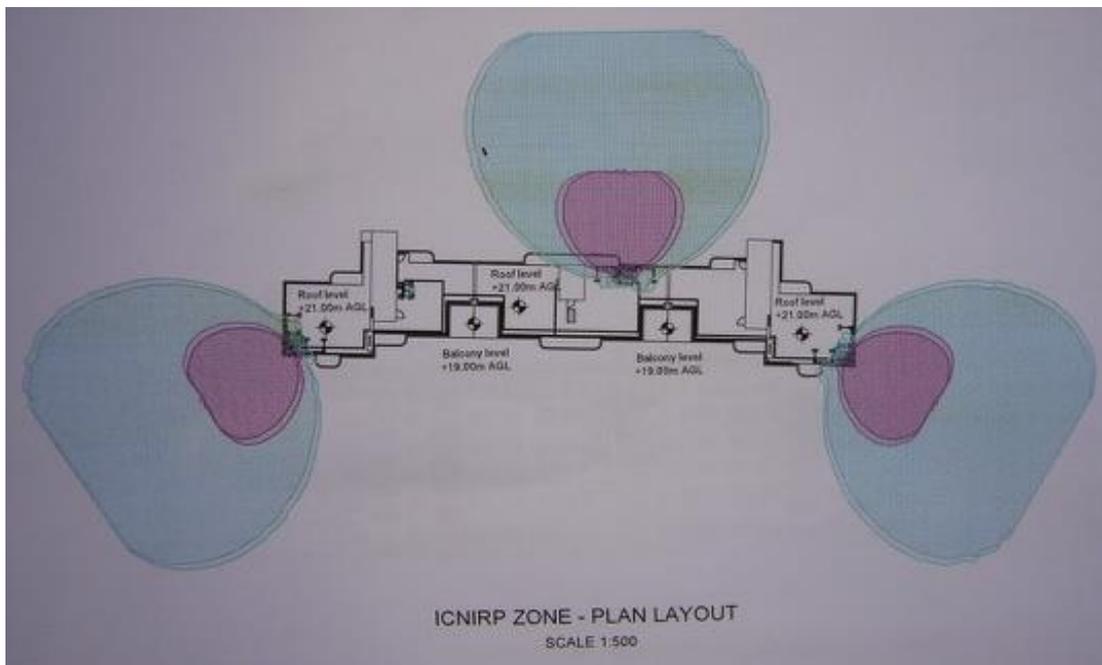
As things stand I don't have much hope that we will be allowed to return to our previous life without a 24/7 watchtower monitoring our every move and microwaving us and the wildlife in our garden in the process. The law is not on our side.

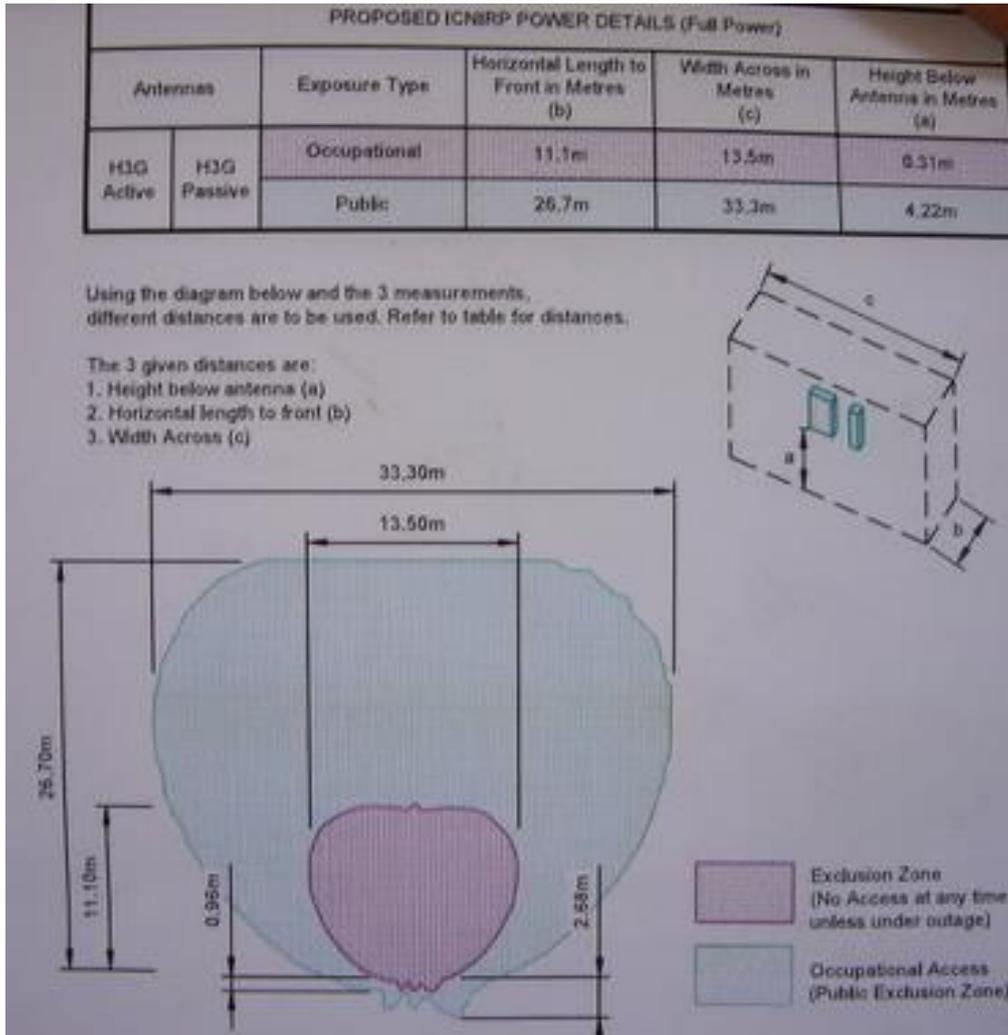
But maybe there is still a little bit of time to initiate some debate about where we seem to be going and stop this madness going any further. Who decides that we will have no choice but to live in "smart" cities and a toxic digitalised environment????

Please get in touch if you would like me to send you all the various letter exchanges or if you would like to meet up sometime.

Best wishes and thanks again for your attempts to raise awareness

29. Below are pictures of the exclusion zones on the council building caused by the 5G antenna:





30. Next is a story which I found during my research relating to a woman who had a mobile phone mast put up right outside of her house some years ago.

Home sweet home

We have a lovely home, but a mobile mast has been put up right next to it. Do we have a choice? No; none. Even though we protested and successfully objected so that our local planners refused, along came an HM Planning Inspector to tell us it wouldn't look bad to them, and that's all that matters. So up it went.

Now I have problems sleeping, my partner has headaches and my daughter has started having nosebleeds. Who will believe me? I know there are lots of people and families out there like ours experiencing the same, but no-one accepts what we are saying. The collusion is staggering between the industry that says we just don't understand, police who say it will 'all prove to be unfounded' and the protection authorities who say there is no evidence, whatever we say and however many of us say it. Then the industry is lobbying government and asking for more de-regulation, because they are slipping behind in international competitiveness and not making as much money as they want. And the government stands by and will not even listen to MPs in

the House of Commons who want proper debate, and a slow-down in this hateful race, until we know more.

My partner was then approached by O2 Airwave because he runs a business with a convenient location for a TETRA mast. He knows that the people who work for him are worried so he asked the NRPB for a current statement on safety, and whether he can tell his employees that TETRA will not affect them.

And the NRPB told him that he 'must make his own mind up on that', and by the way, some people say that low frequency microwaves like TETRA have been used for weapons or mind control, but there is no evidence. He didn't ask that!

A cruel dilemma

So we put our lovely home on the market to move on. We feel we can't risk the children living with this radiation so close. Maybe their school is protected by the planning rules, but our home isn't.

What do we do? Protest and risk drawing attention to our house? Or keep quiet and hope no-one notices the silver monstrosity by the garden fence? If we protest and can't sell, we can't get away. And then we will be told that it is because we have scared people off, not because of the mast itself, because without us they would not have worried! But it is really making us unwell!!!

We decided we must tell everyone who asks that the mast has been declared OK. It has a certificate that says it is operating according to the guidelines, and that the NRPB says it is probably safe. If we say that the NRPB says it is safe we could be held to account for lying.

We wrote to the local planning office to seek advice. What do we legally have to say to people buying our house? Does this fear of ours (that our symptoms are from the mast, and may be bad in the long term as well as very unpleasant all the time), count as something material to be declared about the property? The planners refused to advise us, and suggested we seek our own legal advice.

Am I getting this right? It appears that since the government has chosen not to protect us from something that they certainly know may not be harmless, we must pay to find out if we must warn prospective buyers of the danger they say probably does not exist? And if the legal advice is that we must inform prospective buyers? Isn't that like warning them off? How extraordinary.

A family viewed our house, with happy little children. It is a lovely house, and the rooms are bright, a good size and well-proportioned. It is an ideal family home. *I don't want them to buy it.* But I want to get away. I want to sleep again, and for us all to be happy and well.

Mr Blair; Mr Prescott; Mr Clark; Sir William Stewart, at the Health Protection Agency. None of you seems to care. Is my family an acceptable casualty in the cause of your politics? Forgive me if I believe down to my toes that we have lost democracy, lost our human rights and that you have abdicated all responsibility.

31. Please see the articles below referring to health impacts in Switzerland when their 5G was switched on in 102 locations in Geneva.

<https://mdsafetech.org/2019/07/20/the-first-report-of-5g-injury-from-switzerland/>

32. And finally, please see below the story of the fight against 5G in the US - Local Soccer Mom Versus Multi Billion 5G Industry.

Deb Persampire, an American mother, decided to do something when she found out about the 5g rollout in her town, on her street and outside her house. Without her knowledge and apparently without regard for her safety and that of her children; her local council had instructed the installation of 'small cell' towers all over town.

Her story is your story, the same thing is happening in the UK. EE and Vodaphone are rolling out 5G technology which recent scientific studies have shown to be harmful to human development and function. Please view the video and share widely

<https://www.youtube.com/watch?v=6M7YFI0I9kl&feature=youtu.be>

C. What do some doctors say

33. Do see the letter from Dr Andrew Tressider who is also a trustee of the ES-UK (www.es-uk.com) at **Schedule 2** and his paper at **Schedule 3**. At its heart is the caution that EMFs cause illness in some people.

34. It may also be helpful to point you to the European Commission's 'non-binding guidelines' on EMF. Pages 87 – 89 covers some possible symptoms, not just those associated with over-exposure

<http://ec.europa.eu/social/BlobServlet?docId=14741&langId=en>

35. An extract from the above is below:

High frequency fields (100 kHz to 300 GHz)

Exposure to high frequency fields below the relevant action level (AL) may cause interference with the normal functioning of active implanted medical devices or bodyworn medical devices. Any malfunction could have potentially serious consequences.

Passive medical implants that are metallic may serve as absorbing antennas resulting in local increases in RF exposure of tissues and possible injury.

The first indication of exposure to high frequency fields may be the sensation of warmth as the worker or parts of their body are heated by the field. However this may not always be the case and feeling warm is not a reliable warning signal. It is also possible to 'hear' pulsed fields between 300 kHz and 6 GHz, so clicking, buzzing or hissing noises may be heard by exposed workers.

Prolonged exposure of the whole body can result in a rise in body temperature.

Increased temperature of only a few degrees can lead to mental confusion, fatigue, headache and other symptoms of heat stress. High physical workloads, or working in hot and humid conditions will increase the likelihood of these effects. The severity of the symptoms also depend on the physical condition of the worker, whether they are dehydrated or not, and on the clothing they are wearing.

Partial body exposure can lead to localised heating or 'hot spots' in muscles or internal organs, and also cause superficial burns which appear instantly on exposure. Serious internal injury is possible without obvious burns on the skin. Strong local overexposure may cause damage to muscles and surrounding tissues in exposed limbs (medial compartment syndrome), which develops instantly or within a few days at most. In general terms, most tissues can tolerate increases in temperatures for short periods without harm, but a temperature of 41 °C for more than 30 minutes will produce damage.

A temporary lowering of sperm count is possible with exposures that cause substantial heating of the testis, and heating may increase the risk of miscarriage in early pregnancy.

The eye is known to be sensitive to heat, and very high exposure well above the ELV may cause inflammation of the sclera, iris or conjunctiva. Symptoms can include redness, pain in the eyes, sensitivity to light and pupillary constriction. Cataracts (opacities of the lens) are rare but a possible late effect of exposure, and can take weeks or months to develop following exposure. There are no reports of effects occurring years after exposure.

For higher frequency fields (around 6 GHz and above) energy absorption becomes increasingly superficial. These fields will be absorbed by the cornea of the eye, but exposures well above the ELV will be required to cause burns. The skin will also absorb these high frequency fields and at sufficiently high exposures this may result in pain and burns.

Workers may suffer electric shock or contact burns from touching working antennas or from contact with large metallic, ungrounded objects, such as cars, in the field. Similar effects may occur when an ungrounded worker touches a grounded metallic object.

These burns may be superficial or deep within the body. Metallic implants, including dental fillings and body piercings (as well as jewellery and some tattoo pigments), can concentrate the field leading to localised heating and thermal burns. High exposure of the hand may also result in nerve damage.

Case reports of overexposed workers suggest other symptoms may also be possible.

These include headaches, bowel upset, lethargy, and long-lasting feelings of 'pins and needles' in the exposed tissues.

Stress reactions may be associated with actual or suspected overexposure.

36. Do also see the article of the European Academy of Environmental Medicine which is at **Schedule 13**. It sets out a number of illnesses associated with long term exposure to EMFs.

37. You may also want to review the site for Physicians for Safe Technology which has a whole section on 5G Telecommunications and lists numerous biological effects and impacts:

<https://mdsafetech.org/5g-telecommunications-science/>

38. The 2018 European Commission Scientific Committee on Health, Environment and Emerging Risks (SCHEER) regularly updates emerging risks to public and environmental health. In their 2018 European Commission Statement on Emerging Health and Environmental Issues lists e cigarettes, perflourinated compounds, plastics, nanoparticles and also includes virtual reality and electromagnetic radiation, especially 5G technologies. They state "The lack of clear evidence to inform the development of exposure guidelines to 5G technology leaves open the possibility of unintended biological consequences."

https://ec.europa.eu/health/scientific_committees/scheer_en

39. The report below states at page 14:

<https://mdsafetech.files.wordpress.com/2019/02/scheer-report-emerging-concerns-2018-russell-mentioned.pdf>

"On the horizon, a new generation of even shorter high frequency 5G wavelengths is being proposed to power the Internet of Things (IoT). The IoT promises us convenient and easy lifestyles with a massive 5G interconnected telecommunications network. However, the expansion of broadband with shorter wavelength radiofrequency radiation highlights the concern that health and safety issues remain unknown. Controversy continues with regard to harm from current 2G, 3G and 4G wireless technologies. 5G technologies are far less studied for human or environmental effects" (Russell, 2018)."

and

"5G networks will soon be rolled out for mobile phone and smart device users. How exposure to electromagnetic fields could affect humans remains a controversial area, and studies have not yielded clear evidence of the impact on mammals, birds or insects. The lack of clear evidence to inform the development of exposure guidelines to 5G technology leaves open the possibility of unintended biological consequences"

D. The government and its agencies have washed their hands of health issues

40. There is no doubt that 5G will have massive commercial benefits. The connectivity of over 100 billion devices, self driving cars, nano-technology, remote medical interventions and applications which have not yet been thought about. But, at what cost to human health?

41. The Prime Minister's position was set out in his speech to the United Nations in September, 2019.

<https://www.gov.uk/government/speeches/pm-speech-to-the-un-general-assembly-24-september-2019>

42. I set out his text below for ease of reference:

Mr President, Your Excellencies, Ladies and Gentlemen, faithful late night audience.

It is customary for the British Prime Minister to come to this United Nations and pledge to advance our values and defend our rules, the rules of a peaceful world.

From protecting freedom of navigation in the Gulf, to persevering in the vital task of achieving a two-state solution to the conflict in the Middle East. And of course I am proud to do all of these things.

But no-one can ignore a gathering force that is reshaping the future of every member of this Assembly. There has been nothing like it in history. When I think of the great scientific revolutions of the past - print, the steam engine, aviation, the atomic age - I think of new tools that we acquired but over which we - the human race - had the advantage, which we controlled. That is not necessarily the case in the digital age.

You may keep secrets from your friends, from your parents, your children, your doctor – even your personal trainer – but it takes real effort to conceal your thoughts from Google. And if that is true today, in future there may be nowhere to hide. Smart cities will pullulate with sensors, all joined together by the “internet of things”, bollards communing invisibly with lamp posts, so there is always a parking space for your electric car, so that no bin goes unemptied, no street unswept, and the urban environment is as antiseptic as a Zurich pharmacy.

But this technology could also be used to keep every citizen under round-the-clock surveillance. A future Alexa will pretend to take orders. But this Alexa will be watching you, clucking her tongue and stamping her foot. In the future, voice connectivity will be in every room and almost every object: your mattress will monitor your nightmares; your fridge will beep for more cheese, your front door will sweep wide the moment you approach, like some silent butler; your smart meter will go hustling - if its accord - for the cheapest electricity.

And every one of them minutely transcribing your every habit in tiny electronic shorthand, stored not in their chips or their innards - nowhere you can find it, but in some great cloud of data that looms ever more oppressively over the human race - a giant dark thundercloud waiting to burst and we have no control over how or when the precipitation will take place. And every day that we tap on our phones or work on our ipads - as I see some of you doing now - we not only leave our indelible spoor in the ether but we are ourselves becoming a resource. Click by click, tap by tap.

Just as the carboniferous period created the indescribable wealth - leaf by leaf - of hydrocarbons, data is the crude oil of the modern economy and we are now in an environment where we don't know who should own these new oil fields. We don't always know who should have the rights or the title to these gushers of cash and we don't know who decides how to use that data.

Can these algorithms be trusted with our lives and hopes? Should the machines - and only the machines - decide whether or not we are eligible for a mortgage or insurance or what surgery or medicines we should receive? Are we doomed to a cold and heartless future in which computer says yes - or computer says no with the grim finality of an emperor in the arena? How do you plead with an algorithm? How do you get it to see the extenuating circumstances and how do we know that the machines have not been insidiously programmed to fool us or even to cheat us?

We already use all kinds of messaging services that offer instant communication at minimal cost. The same programmes, platforms, could also be designed for real-time censorship of every conversation, with offending words automatically deleted, indeed in some countries this happens today. Digital authoritarianism is not, alas, the stuff of dystopian fantasy but of an emerging reality.

The reason I am giving this speech today is that the UK is one of the world's tech leaders - and I believe governments have been simply caught unawares by the unintended consequences of the internet; a scientific breakthrough more far-reaching in its everyday psychological impact than any other invention since Gutenberg. And when you consider how long it took for books to come into widespread circulation, the arrival of the internet is far bigger than print. It is bigger than the atomic age - but it is like nuclear power in that it is capable of both good and harm - but of course it is not alone as new technologies seem to race towards us from the far horizon.

We strain our eyes as they come, to make out whether they are for good or bad - friends or foes? AI - what will it mean? Helpful robots washing and caring for an ageing population? or pink eyed terminators sent back from the future to cull the human race?

What will synthetic biology stand for - restoring our livers and our eyes with miracle regeneration of the tissues, like some fantastic hangover cure? Or will it bring terrifying limbless chickens to our tables.

Will nanotechnology help us to beat disease, or will it leave tiny robots to replicate in the crevices of our cells? It is a trope as old as literature that any scientific advance is punished by the Gods. When Prometheus brought fire to mankind in a tube of fennel, as you may remember, that Zeus punished him by chaining him to a tartarean crag while his liver was pecked out by an eagle and every time his liver regrew the eagle came back and pecked it again and this went on for ever - a bit like the experience of Brexit in the UK, if some of our parliamentarians had their way.

In fact it was standard poetic practice to curse the protos heurtes - the person responsible for any scientific or technical breakthrough. If only they had never invented the ship, then Jason would never have sailed to Colchis and all sorts of disasters would never have happened. And it is a deep human instinct to be wary of any kind of technical progress.

In 1829 they thought the human frame would not withstand the speeds attained by Stephenson's rocket and there are today people today who are actually still anti-science.

A whole movement called the anti-Vaxxers, who refuse to acknowledge the evidence that vaccinations have eradicated smallpox and who by their prejudices are actually endangering the very children they want to protect. And I totally reject this anti-scientific pessimism.

I am profoundly optimistic about the ability of new technology to serve as a liberator and remake the world wondrously and benignly, indeed in countless respects technology is already doing just that.

Today, nanotechnology - as I mentioned earlier - is revolutionising medicine by designing robots a fraction of the size of a red blood cell, capable of swimming through our bodies, dispensing medicine and attacking malignant cells like some Star Wars armada. Neural interface technology is producing a new generation of cochlear implants, allowing the gift of hearing to people who would not otherwise be able to hear the voices of their children.

A London technology company has worked out how to help the blind to navigate more freely with nothing more than an app on their smartphones - new technologies, produced in Britain, helping the deaf to hear and the blind to see. And we used to think that printing was something you did to run off a boarding card.

Now a British company has used 3D printing to make an engine capable of blasting a rocket into space. In African countries, millions of people without bank accounts can now transfer money using a simple app; they can buy solar energy and leap in one transaction from no electricity to green power. And new advances are making renewable energy ever cheaper, aiding our common struggle against climate change.

Our understanding of the natural world is being transformed by genome sequencing. The discovery of the very essence of life itself. The secret genetic code that animates the spirit of every living being and allows medical

breakthroughs the like of which we have never known. Treatments tailored to the precise genetic makeup of the individual.

So far, we have discovered the secrets of less than 0.3 percent of complex life on the planet. Think what we will achieve when – and it is a matter of when – we understand 1 or 2 percent, let alone 5 or 10 percent.

But how we design the emerging technologies behind these breakthroughs – and what values inform their design – will shape the future of humanity. That is my point to you tonight my friends, my Excellencies - At stake is whether we bequeath an Orwellian world, designed for censorship, repression and control, or a world of emancipation, debate and learning, where technology threatens famine and disease, but not our freedoms.

Seven decades ago, this General Assembly adopted the Universal Declaration of Human Rights with no dissenting voices, uniting humanity for the first and perhaps only time behind one set of principles. And our declaration - our joint declaration - upholds “freedom of opinion and expression”, the “privacy” of “home or correspondence,” and the right to “seek...and impart information and ideas”. Unless we ensure that new technology reflects this spirit, I fear that our declaration will mean nothing and no longer hold.

So the mission of the United Kingdom and all who share our values must be to ensure that emerging technologies are designed from the outset for freedom, openness and pluralism, with the right safeguards in place to protect our peoples. Month by month, vital decisions are being taken in academic committees, company boardrooms and industry standards groups. They are writing the rulebooks of the future, making ethical judgements, choosing what will or will not be rendered possible.

Together, we need to ensure that new advances reflect our values by design. There is excellent work being done in the EU, the Commonwealth, and of course the UN, which has a vital role in ensuring that no country is excluded from the wondrous benefits of this technology, and the industrial revolution it is bringing about. But we must be still more ambitious.

We need to find the right balance between freedom and control; between innovation and regulation; between private enterprise and government oversight. We must insist that the ethical judgements inherent in the design of new technology are transparent to all. And we must make our voices heard more loudly in the standards bodies that write the rules.

Above all, we need to agree a common set of global principles to shape the norms and standards that will guide the development of emerging technology.

So - here's the good news - I invite you next year to a summit in London, a wonderful city, where by the way it is not raining 94 per cent of the time, and where at one stage - when I was Mayor of London - we discovered that we had more Michelin starred restaurants even than Paris. The French somehow rapidly recovered - by a process that I wasn't quite sure was entirely fair. But we still have by far, in the UK, by far the biggest tech sector - fintech, biotech,

meditech, nanotech, green tech - every kind of tech - in London - the biggest tech sector anywhere in Europe, perhaps half a million people working in tech alone.

I hope you will come there, where we will seek to assemble the broadest possible coalition to take forward this vital task, building on all that the UK can contribute to this mission as a global leader in ethical and responsible technology. If we master this challenge – and I have no doubt that we can – then we will not only safeguard our ideals, we will surmount the limits that once constrained humanity and conquer the perils that once ended so many lives.

Together, we can vanquish killer diseases, eliminate famine, protect the environment and transform our cities. Success will depend, now as ever, on freedom, openness and pluralism, the formula that not only emancipates the human spirit, but releases the boundless ingenuity and inventiveness of mankind, and which, above all, the United Kingdom will strive to preserve and advance.

Excellencies, Ladies and Gentlemen, thank you for your kind attention.

Published 25 September 2019

43. You may be forgiven for thinking that the Prime Minister was not in favour of 5G. But you will notice the absence of one important fact in his speech – HEALTH. He spoke merely of “security”.
44. There are many government agencies tasked with ensuring that our environment is free from harmful agents. Those involved in the electromagnetic frequency or radiation space in the UK are set out in **Schedule 4**.
45. You will see from these submissions that many have all washed their hands of the impact on health of 5G and leave those who suffer health consequences with no recourse or place to turn for help.
46. At present, neither the government nor its agencies are prepared to take account of the health impacts found in over 1800 scientific papers – a list and explanation of those papers are set out in the 1557 pages of the Bioinitiative report.
47. The government and its agencies justify its their position by stating that they operate within the international ICNIRP guidelines which states that there is no harm from EMFs below the limits which the ICNIRP set. The evidence to confirm that Public Health England has washed their hands in this way in **Schedule 5**.
48. 5G rollout is the policy of the Department of Digital, Media, Culture and Sport:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/597421/07.03.17_5G_strategy_-_for_publication.pdf
49. Health is not mentioned anywhere in the whole document - nor have any risk assessments been published here. One of the biggest risks is actually to the Treasury

- with decreasing numbers of healthy taxpayers left in 10-15 years time perhaps, whilst in the document there are all sorts of applications of technology discussed that none of us need or want – not at the cost of our health.

50. A risk assessment is legally compulsory for such a project, not just by PHE, but also by each local council whose workers are working within the public spaces of the borough and exposed to radiation.

<http://www.hse.gov.uk/pubns/indg163.pdf>

51. While the above link relates to The Control of Electromagnetic Fields at Work Regulations 2016 in the context of medical MRI but applies to EMFs generically. The link to the regulations are at:

<http://www.legislation.gov.uk/ukxi/2016/588/regulation/4/made>

52. Some relevant paragraphs from the regulations are set out in **Schedule 6**. The regulations generally require employers to ensure that worker exposure to EMFs does not exceed certain exposure limit values (ELVs).

53. It is unknown whether a risk assessment has been carried out by any of the mobile service operators, PHE or any local councils.

54. Any risk assessment which should have been done is required to take account of all up to date science and not merely outdated and industry biased guidelines. Even without the legal grounds, on a simple moral basis, if society is to be taken on a voyage, it would be nice to know that the ship was seaworthy, the captain sober, the crew alert and competent, the navigation aids effective, all relevant charts consulted, and a good lookout kept for icebergs, (even for unsinkable ships)... (we had one of those a hundred years or so ago...).

55. While your council, as an employer, is not expected to anticipate unforeseeable risks, you have now been told in these submissions of one serious risk and you cannot now unknow them.

56. As an employer, your employees work in the borough, in the public space. They will be affected by these microwaves and it is your duty to consider a proper risk assessment in order to assess the risks and to keep them safe.

57. The Department for Digital, Culture, Media and Sport responded in July, 2019 to a petition to Parliament asking for a suspension of the roll out of 5G within the petition, although it is open until 28 December, 2019:

<https://petition.parliament.uk/petitions/262842>

58. The reply of DCMS is set out below for ease of reference:

Exposure to radio waves has been researched and reviewed. The evidence suggests exposure from 5G radio systems within current guidelines does not pose a risk to public health or the environment.

The Government takes concerns about potential health and environmental effects from exposure to radiofrequency electromagnetic fields (EMF), or radio waves, seriously.

The Department of Health and Social Care (DHSC) and Public Health England (PHE, their Executive Agency who offer independent scientific advice) lead on health issues for Government.

PHE's advice is that the overall weight of evidence does not suggest devices producing exposures within current ICNIRP guidelines pose a risk to public health.

PHE's advice is based on health and EMF evidence reviews that have been prepared by scientific expert groups in the United Kingdom and around the world. ICNIRP is formally recognised as an official collaborating non-governmental organisation by the World Health Organization (WHO) and the International Labour Organization.

ICNIRP published draft updated radiofrequency guidelines in 2018 and is presently finalising these new guidelines. Following a consultation, the documents did not suggest there will be major changes in the rationale and restrictions from their current guidelines which were last reviewed in 2009.

The main conclusion from the WHO reviews is that EMF exposures below the limits recommended in the ICNIRP guidelines do not appear to have any known consequence on health. There may be a small increase in overall exposure to radio waves when 5G is added to an existing network or in a new area; but, this is expected to remain low relative to guidelines.

International product standards applying to mobile phones and other transmitting devices, health and safety legislation, and planning policy for telecommunications developments all look towards compliance with exposure restrictions from the ICNIRP guidelines. The UK network operators are already committed to complying with the guidelines.

A small number of countries have adopted lower restriction values than the ICNIRP guidelines, and it reflects the different ways they have approached concerns about this topic.

The United Kingdom follows the ICNIRP guidelines, along with many other countries and there is no convincing evidence that adverse health effects can occur if these guidelines are complied with.

PHE is committed to keeping its advice under review and will update its advice should new evidence dictate it necessary.

The Department of Environment, Food and Rural Affairs (DEFRA) lead on environmental issues for Government.

Electromagnetic radiation (EMR) has the potential to impact the movement of insects and some species of animals, but there is currently no evidence that

human-made EMR, at realistic field levels, has population level impacts on (a) plants, (b) animals or (c) insects.

The latest overview of evidence of current knowledge on the impacts of artificial electromagnetic radiation (EMR) on wildlife, was written in 2018, funded by the EU EKLIPSE project (Knowledge & Learning Mechanism on Biodiversity & Ecosystem Services).

The following comprehensive scientific review reports and statements have informed this advice. These can be viewed at:

<https://www.gov.uk/government/collections/electromagnetic-fields>.

<https://www.gov.uk/government/publications/mobile-phone-base-stations-radio-waves-and-health/mobile-phone-base-stations-radio-waves-and-health>

[http://www.eclipse-mechanism.eu/documents/15803/0/EMR-](http://www.eclipse-mechanism.eu/documents/15803/0/EMR-KnowledgeOverviewReport_FINAL_27042018.pdf/1326791c-f39f-453c-8115-0d1c9d0ec942)

[KnowledgeOverviewReport_FINAL_27042018.pdf/1326791c-f39f-453c-8115-0d1c9d0ec942](http://www.eclipse-mechanism.eu/documents/15803/0/EMR-KnowledgeOverviewReport_FINAL_27042018.pdf/1326791c-f39f-453c-8115-0d1c9d0ec942)

<https://www.who.int/peh-emf/standards/en/>

Department for Digital, Culture, Media and Sport.

59. Even the mobile service providers have washed their hands of the health effect of their EMFs by referring to the ICNIRP guidelines. The evidence for this is at **Schedule 7** which shows that Vodafone and Telefonica SA (O2) all rely on the ICNIRP guidelines. When I wrote to BT plc (EE) and Three (3), neither responded.
60. As you know already, for planning purposes, as long as a mobile service operator delivers a certificate to the local council that the frequency for their mast is within the ICNIRP guidelines, the council is **prohibited** from considering any grounds of objection to the siting of the mast on health grounds. Any objection to the siting can then only be made on aesthetic grounds – “does it look good in the chosen location”.
61. Now, the government want to remove even that level of control from the local councils (see below) and the consultation for those plans will close on 4 November, 2019 (the original date was 19 November but it has been brought forward for reasons of which I am unaware).
62. In fact, the government want to go as far as to remove the right to peaceful enjoyment of property by permitting mobile service operators to demand entry into the property of renters to put up their equipment even if the persons renting object – see the site below and the reference to “Providing Operators with a ‘right to entry’ to flats, business parks, office blocks and other tenanted properties to allow those who rent to receive fast, reliable connectivity, from the right supplier at the best price” in the Future Telecoms Infrastructure Review:

<https://www.gov.uk/government/news/forging-a-full-fibre-broadband-and-5g-future-for-all>
63. Nowhere in that document are health impacts mentioned.
64. For the reasons set out in these submissions I suggest that this is a targeted assault on the rights of citizens, their property and their human rights.

65. I have set out in **Schedule 8** some of the Parliamentary debates, mentions and discussions referring to 5G and health concerns. You will see that all arguments stop with reference to the ICNIRP guidelines which state that there is no health harm for human interaction with frequencies below their limits so any concerns re health are misplaced.
66. The backstop of the ICNIRP Guidelines seem to be the magical panacea for all concerns.
67. Every government agency, some Members of Parliament, eg Keir Starmer QC and Tulip Siddip are all given the ICNIRP line and look no further (see **Schedule 9**).
68. **This total subjugation of the eyes and ears of the citizenry protection mechanism is faultless and have rendered them all deaf to the pleas of sufferers.**

E. So, what are the ICNIRP guidelines and what's wrong with them

69. There are some fundamental criticisms of these guidelines, not least of which is that these guidelines were set for short term exposure and not for long term exposure to EMF. The guidelines are, therefore, outdated and need to be reviewed.
70. There are other criticisms which state that the ICNIRP has dismissed scientific research linking cancer to those living near phone masts. They have been criticised by a number of professionals. Some are set out below.
71. One such criticism is from the Council of Europe in 2011 as below:

"it is most curious, to say the least, that the applicable official threshold values for limiting the health impact of extremely low frequency electromagnetic fields and high frequency waves were drawn up and proposed to international political institutions (WHO, European Commission, governments) by the ICNIRP, an NGO whose origin and structure are none too clear and which is furthermore suspected of having rather close links with the industries whose expansion is shaped by recommendations for maximum threshold values for the different frequencies of electromagnetic fields" (The rapporteur's memorandum attached to a resolution adopted by the Standing Committee of the Parliamentary Assembly of the Council of Europe in May 2011)

72. Another is at:

<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/>

73. Sarah Starkey sets out a blistering, detailed and reasoned critique of the guidelines below:

https://www.jrseco.com/wp-content/uploads/Starkey_2016_ICNIRP.pdf

74. Michael Bevington sets out a summary critique which is at **Schedule 10** and a more detailed critique which is at **Schedule 11**.

F. How do the UK agencies interact with the international agencies and ICNIRP

75. Many of the people involved belong to the groups which make up the PHE, COMARE, WHO AND ICNIRP.
76. PHE relies on ICNIRP.
77. COMARE relies on WHO which relies on ICNIRP.
78. WHO will produce its EHC which will form the basis of ICNIRP's revision - but they're mostly the same people.
79. The following is a helpful interface of PHE, DHSC, ICNIRP and WHO as at October 2019.
80. NRPB/HPA/PHE, the UK's agency concerned with public health and radiation and sponsored by the Department of Health and DHSC, adopted the 1998 ICNIRP guidelines following the EU 1999 recommendation.
81. The ICNIRP guidelines are based on ICNIRP's general approach and principles, published in 2002.
82. These principles include the adoption by governments of guidelines lower than ICNIRP's short-term ones based on the heating hypothesis to protect vulnerable groups.
83. NRPB/HPA/PHE have adopted precautionary advice over children, one of the vulnerable groups.
84. It is reasonable to understand that in adopting certain guidelines that one accepts the principles on which these guidelines are based, otherwise there is no basis for adopting these guidelines rather than some other guidelines.
85. The World Health Organization does not set guidelines. It has entrusted this role to the private self-elected group ICNIRP, spun out of another private group concerned with nuclear radiation group.
86. WHO will produce a new EHC which will inform the next ICNIRP guidelines.
87. ICNIRP 1998 guidelines
<https://www.icnirp.org/cms/upload/publications/ICNIRPemfgdl.pdf>
88. ICNIRP 2002 general approach

<https://www.icnirp.org/cms/upload/publications/ICNIRPphilosophy.pdf>

89. WHO 2006 (RF) reliance on ICNIRP

<https://www.who.int/peh-emf/publications/facts/fs304/en/>

90. WHO 2007 (ELF) reliance on ICNIRP

<https://www.who.int/peh-emf/publications/facts/fs322/en/>

91. PHE complies with ICNIRP and adopts precautionary advice on children, 2017, 2018 [in line with ICNIRP general approach 2002]

<http://www.mardenvillage.co.uk/wp-content/uploads/2017/06/PHE-RF-Advice-Summary-12-May-2017.pdf>

92. <https://www.whatdotheyknow.com/request/574110/response/1376200/attach/3/PHE%20RF%20Advice%20Summary%202018%20Dec%202018.pdf>

93. PHE's COMARE reliance on WHO, 2018 (minutes, 2.12)

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/786270/COMARE_121_minutes_-_final.pdf

94. Some information on the various bodies above is below:

COMMITTEE ON THE MEDICAL ASPECTS OF RADIATION IN THE ENVIRONMENT (COMARE)

121st meeting, Thursday 22nd November 2018

Skipton House, London

2.12 The Chair informed members that there had been continued correspondence from the UK & Commonwealth EMF Action Group on several issues, including attendance at meetings as observers and interest in the formation of a working group for non-ionising radiation (NIR) issues. The Chair has discussed the working group suggestion with DHSC in regard to the committee's work programme. While health issues associated with electromagnetic fields (EMFs) are within COMARE's remit, the formation of a NIR working group now is not considered a productive use of the committee's time. COMARE has received no specific requests for advice on NIR issues. The Chair reminded members that the World Health Organisation (WHO) is currently undertaking a review on radiofrequency electromagnetic fields and the committee would not wish to duplicate this work. It was proposed that following publication of the WHO report, the committee could review the document and produce a statement. Members were advised that there is UK engagement with WHO through the international EMF project. Members discussed the remit of the committee for NIR work and the balance with work

on ionising radiation issues. Members were content with the proposal to review the WHO report and to maintain a watching brief on NIR issues.

**WORLD HEALTH ORGANIZATION
ORGANISATION MONDIALE DE LA SANTE**

Téléphone Central /Exchange (+41 22) 791 21 11
direct /+4122)791

In reply please refer for: E15-445-11
Prière de rappeler la référence:

Gruppe Hans U. Jakob
Flühli 17
CH 3150 Schwarzenburg
Switzerland

14. September 2001

Dear Sir

...

ICNIRP is an independent scientific commission of eminent scientists established by the International Radiation Protection Association (IRPA) to provide advice on non-ionizing radiations in the same way as the International Commission on Radiological Protection (ICRP) has done for ionizing radiation for over 65 years. It is an independent and separate organization. **It is not "under-organization of WHO"** as stated in your letter.

However, ICNIRP is **one of a very large number of NGOs** in official relations with WHO and it has been working with WHO on matters related to the protection of people from exposure to non-ionizing radiation. These radiations include EMF, UV, static fields and ultrasound. ICNIRP uses WHO's health risk assessments to draft guidelines on human exposure limits, which have now been accepted for guidance or mandated into law in many countries.

...

gez.

Ann Kern

Executive Director, Sustainable Development
and Healthy Environment

cc:

M. Marta Mauras, Deputy Secretary-General'Office, UN, New York
Mr. Patrizio Civili, Assistant Secretary-General for Policy, Coordination and
Inter-Agency Affairs

xxxx

Government response to the Stakeholder Advisory Group on extremely low frequency electric and magnetic fields (ELF EMFs) (SAGE) recommendations

2009

5. The UK adopted the 1998 ICNIRP⁵ EMF public exposure guidelines in terms of the 1999 European Recommendation (1999/519/EC)⁶. The electricity industry currently complies with these guidelines on a voluntary basis.

13. The same NRPB 2004 publication recommended the adoption in the UK of the international (ICNIRP) guidelines based on the known science but also “that government should consider the possible need for further precautionary measures.” Precaution is mentioned because of the uncertainty in the science.

29. The Government recommends that the electricity industry takes appropriate action to identify any homes and schools that do not currently meet the ICNIRP requirements because of the proximity of high voltage power lines, and addresses the need for remedial actions to ensure that exposures do not exceed the relevant ICNIRP guidelines.

42. It is for EU Member States to determine the circumstances in which the adoption of the ICNIRP guidelines is appropriate in terms of the EU recommendation. In this regard, the UK Government considers that exposure for potentially significant periods of time might reasonably be regarded as referring to residential properties, and to properties where members of the public spend an appreciable proportion of their time. The ICNIRP guidelines are formally incorporated into the planning system for radio telecommunications but not in regard to overhead power lines, so in taking forward actions in response to the SAGE report the Government will take the opportunity to consider this matter further.

47. In the light of the above advice, we recommend that the electricity industry take steps to identify any existing homes and schools that do not meet the ICNIRP requirements because of the proximity of high voltage power lines and to consider what remedial actions might be taken to ensure that exposures do not exceed the relevant guidelines.

Summary of Advice from Public Health England on Exposure to Radiofrequency Electromagnetic Fields

12 May 2017

Central to PHE advice is that exposures to radio waves should comply with the guidelines published by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). ICNIRP is formally recognised by the World Health

Organization (WHO). PHE has also issued precautionary advice to discourage the

non-essential use of mobile phones by children.

(available at eg

<http://www.mardenvillage.co.uk/wp-content/uploads/2017/06/PHE-RF-Advice-Summary-12-May-2017.pdf>)

Summary of Advice from Public Health England on Exposure to Radiofrequency Electromagnetic Fields

[February 28 2018]

Central to PHE advice is that exposures to radio waves should comply with the guidelines published by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). ICNIRP is formally recognised by the World Health Organization (WHO). PHE has also issued precautionary advice to discourage the non-essential use of mobile phones by children.

(available at eg

<https://www.whatdotheyknow.com/request/574110/response/1376200/attach/3/PHE%20RF%20Advice%20Summary%2018%20Dec%202018.pdf>)

Electromagnetic fields and public health

Exposure to extremely low frequency fields

Backgrounder 322

June 2007

<https://www.who.int/peh-emf/publications/facts/fs322/en/>

International exposure guidelines

Health effects related to short-term, high-level exposure have been established and form the basis of two international exposure limit guidelines (ICNIRP, 1998; IEEE, 2002). At present, these bodies consider the scientific evidence related to possible health effects from long-term, low-level exposure to ELF fields insufficient to justify lowering these quantitative exposure limits.

1. Electromagnetic fields and public health
 - a) **Base stations and wireless technologies**

Backgrounder 304

May 2006

<https://www.who.int/peh-emf/publications/facts/fs304/en/>

Protection standards

International exposure guidelines have been developed to provide protection against established effects from RF fields by the International Commission on Non-Ionizing Radiation Protection (ICNIRP, 1998) and the Institute of Electrical and Electronic Engineers (IEEE, 2005).

National authorities should adopt international standards to protect their citizens against adverse levels of RF fields. They should restrict access to areas where exposure limits may be exceeded.

95. Of course, ICNIRP provides a disclaimer to its guidelines as below:

“ICNIRP undertakes all reasonable measures to ensure the reliability of information presented on the website, but does not guarantee the correctness, reliability, or completeness of the information and views published. The content of our website is provided to you for information only. We do not assume any responsibility for any damage, including direct or indirect loss suffered by users or third parties in connection with the use of our website and/or the information it contains, including for the use or the interpretation of any technical data, recommendations, or specifications available on our website.”

96. This does beg the question “Who is ultimately liable”. Here is a body which is advising the world’s governments of safety of their people and it does not accept responsibility for its work.
97. Do see the Council of Europe’s article confirms its views on the dangers of EMFs which is at **Schedule 12**.

G. Let’s now look at some legal aspects

Human rights

98. The Danish Institute for Public Health and the Council for Health-Safe Telecommunications has prepared a legal document related to the broad harm from 5G as well as other wireless technologies. They state:

“The legal opinion is based on the rules of law in the European Convention on Human Rights, the UN Convention on the Rights of the Child, the EU directive on the conservation of natural habitats and of wild fauna and flora, the EU directive on the conservation of wild birds, on the precautionary principle as well as on the Bern- and Bonn- conventions on the protection of animals and plants.”

99. LEGAL OPINION – on whether it would be in contravention of human rights and environmental law to establish the 5G-system in Denmark - FINAL DANISH VERSION TRANSLATED INTO ENGLISH by Christian F. Jensen attorney-at-law (L)

<https://mdsafetech.files.wordpress.com/2019/07/5g-danish-legal-opinion-jensen-2019.pdf>

Other laws and potential breaches of laws

100. Time has not allowed me to review all potential laws which may be contravened by a roll out of 5 G, but a few below come to mind.
- (a) Health & Social Care Act 2012 which states that:
- 'The Secretary of State's duty as to protection of public health:*
- (3) 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.**
- 12) Duties as to improvement of public health*
- 2B) Functions of local authorities and the Secretary of State as to improvement of public health:*
- Each local authority must take such steps as it considers appropriate for improving the health of the people in its area'*
- (b) The HSE 2016 legislation and planning laws does not cover non-thermal effects since both specifically refer to ICNIRP and therefore the Secretary of State is failing to control radiation frequencies as required under the Health and Social Care Act 2012.
- (c) The failure to conduct an Environmental Risk Assessment for 1G, 2G, 3G, 4G and 5G, both for wildlife and humans
- (d) Since the European Environment Agency has recommended the Precautionary Principle, which would mean a moratorium on 3G-5G, and the precautionary principle is enshrined in EU law and the UK government is acting illegally by not adopting the precautionary principle
- (e) The DHSC says it follows ICNIRP guidelines. The ICNIRP 2002 warns governments of people who need non-thermal guidelines to provide them. Therefore, the government is failing by not providing non-thermal guidelines to protect people who need them. This means that the DHSC is failing to protect the 1.2% or 1.6% of the pop who are severely affected.
- (f) Common Assault: since it is proven that RF causes ES symptoms, then to deploy RF without consent is assault.
- (g) The government is ignoring its public equality duty under s. 149 Equality Act by ignoring EHS sufferers in the roll out of 5G.
101. While it is not a breach of the law as such, it should be noted here that insurance companies will not insure against harm caused by EMFs.

H. Your obligations as an employer

102. I have mentioned the The Control of Electromagnetic Fields at Work Regulations 2016 above and some of the provisions are set out in Schedule 6. I hope that you take note of them and apply them in your review.
103. In addition to these, you have health and safety obligations to your workers under the health and safety at work legislation. Council workers work in public places and will be working where the 5G EMFs will be if 5G is rolled out. These should also be taken into account.
104. The council will be personally liable for damage to their employees from 5G as it will be making the decision to roll out that equipment in the public realm, which is their workplace.

I. Government consultation on removing planning control from siting of mast and antenna

105. The government has embarked on public consultation to remove planning control from local councils relating to the siting of masts.

<https://www.gov.uk/government/consultations/proposed-reforms-to-permitted-development-rights-to-support-the-deployment-of-5g-and-extend-mobile-coverage>

106. The closing date is 4 November, 2019.
107. This means that telecommunications companies will have carte blanche to install millions of small cell antennas on streetlights, lamp posts, post boxes, buildings, public corridors etc without prior consent or informing you.
108. For the reasons set out above, it is important for your council to make representations to the government consultation. I hope that I have demonstrated from the above the difficulty that EHS sufferers have in getting anyone to believe them

J. Letter sent by Eric Peel to various government agencies

109. His full letter can be seen at Schedule 14.

K. My petition which is addressed to all local councils

110. I have set up a petition which can be seen below. You can see some of the comments on it.

<https://you.38degrees.org.uk/petitions/5g-suspend-and-review-rollout-of-5g-infrastructure>

L. LED street lights are dangerous and, in addition, are wired with 5G already

111. Some councils use LED lights for their street lights, with no filters on them, as in Gateshead. They are 5G enabled. LED lights emit radiation as they sit on the microwave spectrum. The problem with this is set out below.

112. LED street lights are being rolled out all over the country under the pretext presumably of global warming and the need to use less energy.

113. But the department of health here in UK via Public Health England, their agency, have already told people that these LED lights can harm human eyesight because of the spectral imbalance. They have too much blue light which can cause macular degeneration. The lights themselves emit radiation.

<https://www.highwaysmagazine.co.uk/Public-Health-England-issues-LED-street-lighting-warning/3981>

114. Yet, they are still being rolled out. If you would like to understand why they are a problem, in relation to the blue light from LED lights do watch the video below.

<https://www.youtube.com/watch?v=YRJPCemddJk&fbclid=IwAR0iT6zHGzhFI1J99GDxB8VYDIMRNtA5q2Z5BOw4685-vDTOuVM8q69pKIA>

115. The macular degeneration occurs over a period of say 20 years and can result in blindness. This is what is in store for your council tax payers if LED lights are rolled out with no filters on them as shown in the video above.

116. But there is a further problem for human health and that is the transmission of microwave frequency.

117. These LED streetlights – or many of them – have antennae that pick up and transit 5g frequencies and multiply it up (called densification) and through phasing of the signals make the waves into beams – used for scanning.

118. This is necessary because driverless cars need a form of radar scanning like this is – to avoid collisions.

119. So, if you use LED street lights, 5g is already in your streets, being transmitted through certain LED street lights and is occurring at the 4 g frequencies such as 868Mhz which is the frequency identified for autonomous vehicles.

120. The definition of 5g is densification of signal and collimation of signal – densification is brought about by thousands of streetlights multiplying up the signal and the collimating of the signal into a beam wave for scanning, is brought about by the focusing of the signal in the antennae attached to the street lights. The beams become phased array radar scanning.

121. It is known in the military that operatives cannot be exposed to radar for too long or they suffer from cancer related illnesses. This beaming capability through the 5G

beaming capability on LED street lights are irradiating the public around them with this 5g radiation – a radar scanning radiation - 24 hours a day which is in breach of the guidelines PHE refer to and which are the ICNIRP Guidelines.

122. The ICNIRP guidelines are for exposure at 1mw/m² for 6 minutes only - so even by the ICNIRP guidelines – not accepted by the vast majority of modern science as set out above – this is a breach.
123. Next we have seen that 5g is the densification and collimation of the signal and there are no safety tests for 5g anywhere.
124. As mentioned above, the ICNIRP guidelines refer to heating effects and ignore non thermal effects. So that you understand the power of non thermal effects, compare it to when you go for an Xray. You do not have a warming effect from an xray machine. The xray is brought about by non thermal radiation.
125. Microwave radiation in air is also called non ionizing radiation – so it appears that PHE could be breaking the law since they – as a government body- are not warning people about non ionising radiation which is going through the street lights.
126. The Health and Social Care Act 2012 states that local and national government have a duty to protect the public from ionising and non ionising radiation.
127. In addition, certain streetlights are transmitting microwave radiation now to which no one has given their consent to being irradiated 24 hours a day.

M. Conclusion

128. I have so much more that I can tell you. But for the moment I will leave my submissions at this point.
129. If you accept the submissions in this document, I would suggest to you that we are all being used as guinea pigs in a giant experiment. Nuremberg Code which I have set out in **Schedule 15** prohibits experiments on humans without their consent.

<http://broughttolife.sciencemuseum.org.uk/broughttolife/techniques/nurembergcode>
130. The Nuremberg Code was introduced in August 1947, after the *Nuremberg trials*. In these trials, Nazi doctors were convicted of the crimes committed during *human experiments* on concentration camp prisoners. It attempted to give clear rules about what was legal and what was not when conducting human experiments.
131. The code consists of ten points. The first and most important is that anyone participating in an experiment must give informed consent. This means nobody can be forced to participate in human experiments. All participants must understand the potential risks.
132. The code also gives rules for running the experiments. For example, participants can leave the experiment if they want. Doctors must stop the experiment if they realise it

can harm the patient. Also, no experiment can be made where the risks outweigh the benefits that can be had from it.

133. There is a lot of opposition to 5G around the world including a lot in the US, Australia, Switzerland and other countries. Brussels has suspended the roll out of 5G.
134. I should mention that I have set up a national campaign against 5G involving at least 60 members who are based in different parts of the UK.
135. The vast majority of the population have no idea of what is coming at them and when it is too late, it will be too late to do anything about it because the hardware will be embedded into the landscape and into our lives. We and our children will be sick, with the burden being borne not by the mobile phone service companies who propagate the radiation, but by the taxpayers through the NHS.
136. At what price should humanity's advancement be permitted? Who is to be our protector in this unequal fight?
137. Other references which may be of assistance are set out in **Schedule 16**.