

To the committee - Inquiry into 5G

I am a concerned Australian. I have well-founded concerns regarding the rollout of 5G infrastructure in Australia. I ask that my elected officials adopt the precautionary principle and ask for a moratorium on the deployment of 5G.

## **WORLDWIDE - COUNCILS and CITIES OPPOSING 5G**

Just this week, doctors in Germany conducted a [protest against 5G](#). (N.B.: Some of the technology mentioned below is 4G and 4Gx. This is still significant as it will be a part of the 5G network).

“Switzerland will introduce a monitoring system to assuage concerns about the potential health impact of fifth-generation (5G) mobile frequency emissions and smooth the cutting-edge technology’s rollout, the government said on Wednesday. The cabinet agreed to have the federal environmental agency measure levels of so-called non-ionising radiation, assess the risks and regularly inform the public about its findings.” [Source](#)

- [Currumbin Valley Council, Gold Coast](#) voted to halt the proposed Telstra 4Gx Tower (late July 2019). The Council decision was made in response to community lobbying and the presentation of 1024 petition signatures and 539 written objections to council.
- [Randwick Council, NSW](#) resolved on 16 October 2018 that the [proposed roll out](#) came at a time when international research reported a link between cell tower radiation and the development of cancer.
- [Sutherland Shire Council, NSW](#) in July 2019 – [Sutherland Shire Council objects to small cells being deployed in Lilli Pilli](#).
- [Victoria Park Council](#) A proposed 4G tower in Lathlain has been [denied approval by Council](#) citing reasons of environmental and health impacts arising from the insufficient information on the technology of the tower and the adverse visual impact on the surrounding locality after residents voiced their concerns.
- [Kiama NSW Council](#) Mayor is supportive of a moratorium on the 5G roll out until further research and discussion can take place.

\*\*\*WORLDWIDE\*\*\*

- Glastonbury Council, UK: At the Glastonbury Town Council meeting on Tuesday 11th June a motion proposed by Cllr Mike Smyth and seconded by Cllr Jon Cousins read as follows: “This council has a social responsibility to protect the public and environment from exposure to harm ... and therefore opposes the roll-out of 5G in the Parish of Glastonbury – based on the precautionary principle – until further information is revealed from a newly convened 5G advisory committee (working group).....Town Council challenges 5G, June 2019

Trafford Council, UK: Trafford Council Rejects 5G, News4Trafford, 11/02/2019

- Florence, Italy applies the precautionary principle refusing permissions for 5G and referring to the ‘ambiguity and the uncertainty of supranational bodies and private bodies (like ICNIRP) which ‘have very different positions from each other, despite the huge evidence of published studies’
- Rome Capital City Hall XII APPROVED MOTION
- Municipality of Florence MOTION APPROVED
- Municipality of Rocca di Papa (Rome) RESOLVED APPROVED
- Municipality of Savignano Irpino (Avellino ) RESOLVED APPROVED
- Municipality of Viareggio (Lucca) RESOLVES APPROVED
- Municipality of Cinto Euganeo (Padua) APPROVED RESOLUTION
- Municipality of Cervaro (Frosinone) APPROVED RESOLUTION
- Municipality of Fresagrandinaria (Chieti) MOTION APPROVED
- Municipality of Conca Casale (Isernia) MOTION APPROVED
- Municipality of Marsaglia (Cuneo) MOTION APPROVED
- Municipality of Sesto Fiorentino (Florence) MOTION APPROVED
- Municipality of Campiglia Cervo (Biella) RESOLUTION APPROVED
- Municipality of San Gregorio Matese (Caserta) PROHIBITION OF THE MAYOR AT 5G
- The Swiss Canton of Vaud adopts a resolution calling for a moratorium on 5G antennas until the publication of a report on 5G by the Swiss Federal Office for the Environment,
- Geneva adopts a motion for a moratorium on 5G calling on the Council of State to request WHO to monitor independent scientific studies to determine the harmful effects of 5G.
- The Netherlands: Members of Parliament in the Netherlands insist that radiation research must be carried out before any approval of the 5G network. Chamber wants radiation research first, then 5G network, AD News, 04/04/2019
- Russia: The Ministry of Defense refused to transmit to the operators the frequencies for 5G, Vedomosti, 28/03/2019
- State of Louisiana, USA unanimously voted to stop 5G calling for study of effects on health and environment before 5G starts.

- Portland, Oregon city officials state clear opposition to the installation of 5G networks around the city, supported by the Mayor and two commissioners.
- Oregon State Legislative Assembly in Senate Bill 283 declares health emergency. Directs State Health Authority to review studies of health effects of exposure to RF radiation in schools at least by reviews of peer-reviewed, independently funded studies and to recommend how to reduce children's exposure in schools
- California Supreme Court Justices unanimously uphold a 2011 San Francisco ordinance requiring telecommunications companies to get permit before placing antennas on city infrastructure.
- Mill Valley City Council voted unanimously to block cellphone companies from attempting to build 5G towers in the country and enacted an urgency ordinance to regulate 'small cell' towers.
- Petaluma, California No Small Cell shall be within 500 feet of any residence
- San Diego County: No small cells located within 1,000 feet of schools, child care centers, hospitals, or churches
- Mason, Ohio: No small cells in residential areas or within 100 feet of residential property
- Burlington, Massachusetts: Annual recertification fees for small cells
- Baton Rouge, Florida: Small cell deployment halted. May 30, 2019, Baton Rouge mayor hits pause on AT&T's 'small cell' towers after complaints from residents.
- Proposed - New Hampshire Bill 522: An act establishing a commission to study the environmental and health effects of evolving 5G technology which asks "Why have 1,000s of peer-reviewed studies, including the recently published U.S. Toxicology Program 16-year \$30 million study, that are showing a wide range of statistically significant DNA damage, brain and heart tumors, infertility, and so many other ailments, being ignored by the Federal Communication Commission (FCC)?" and "Why are the FCC-sanctioned guidelines for public exposure to wireless radiation based only on the thermal effect on the temperature of the skin and do not account for the non-thermal, non-ionizing, biological effects of wireless radiation?"
- Hallandale Beach, Florida: Passes 5G Small Cell Tower Resolution: Read press release here.
- Greendale, Wisconsin Resolution No. R2018-20 in November 2018: The Board of Trustees of the Village of Greendale, County of
- Milwaukee, State of Wisconsin, passed Resolution No. R2018-20 in November 2018 in opposition to the FCC's September 26, 2018 Order because the Order's an unprecedented attack on local control of Greendale's largest asset, the public rights-of-way, for 5G technology; threatens the Village's responsibility to protect the health, safety, and welfare of its residents; and threatens the Village of Greendale's designation as a National Historic Landmark. RVICES, AND ASKING FOR CHANGES THAT MAINTAIN A REASONABLE LEVEL OF LOCAL
- Germany: BfS recommends careful 5G expansion, The Federal Office for Radiation Protection (BfS), 20/03/2019
- Guernsey: Call to halt 5G technology in Guernsey due to health fears, ITV News, 11/03/2019
- New York: <https://www.billtrack50.com/BillDetail/1140648><https://www.billtrack50.com/BillDetail/1140648>

### **SAFETY TESTING**

- Why is it deemed acceptable to expose the public to 5G technology in the absence of longitudinal safety studies or any fact-based assurance of safety? 5G will use pulsed millimetre waves to carry information. But as Dr. Joel Moskowitz points out, **most 5G studies are misleading because they do not pulse waves**. This is important because research on microwaves already tells us how pulsed waves **have more profound biological effects on our body** compared to non-pulsed waves. Previous studies, for instance, show how pulse rates of the frequencies led to gene toxicity and DNA strand breaks.

<https://blogs.scientificamerican.com/observations/we-have-no-reason-to-believe-5g-is-safe/>

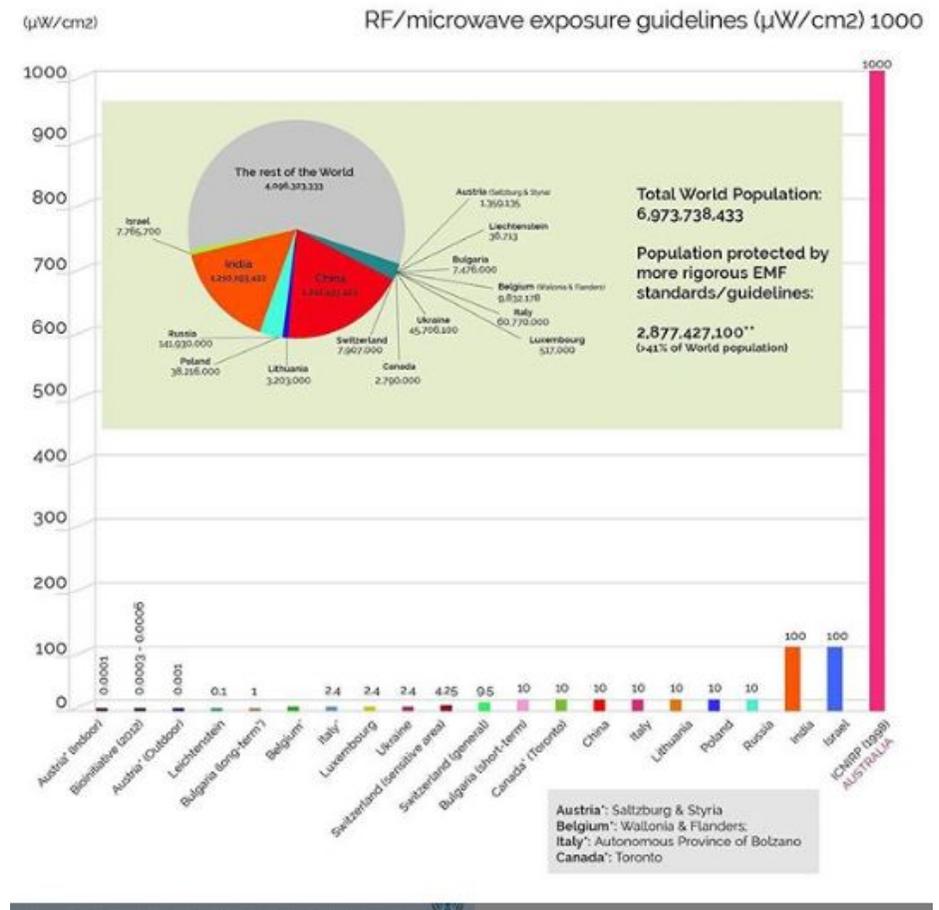
### **INSURANCE**

It is interesting to note that insurance companies like [Lloyds of London](#) and Zurich Australia exclude damage from EMF radiation. In November 2010, Lloyd's of London Insurance published '[Electromagnetic fields from mobile phones: recent developments \(376.62 KB, pdf\)](#)'.

### ARPANSA STANDARDS

Why, when by your own review nearly half of the studies in the ARPANSA database show non-thermal effects, does the standard only cover thermal effects and offer no protection against non-thermal effects at much lower levels of exposure?

Why is Australia's rate of exposure limits 100x higher than Russia's and China's?



## HEALTH

The full capacity of 5G raises health concerns for me, due to evidence that current 3G, 4G technology presents:

### **Injury from 5G has been reported in Switzerland**

The first reported injury of 5G in a news report comes from Switzerland, where 5G has been launched in 102 locations. The weekly French-language Swiss magazine [L'illustré](https://www.emfacts.com/2019/07/swiss-magazine-reports-first-5g-injuries-in-geneva/) interviewed people living in Geneva after the 5G rollout with alarming details of illness. Please read <https://www.emfacts.com/2019/07/swiss-magazine-reports-first-5g-injuries-in-geneva/>.

### **INCREASED EXPOSURE TO HARMFUL EMF/RADIATION**

*“The new 5G wireless technology involves millimetre waves (extremely high frequencies) producing photons of much greater energy than even 4G and WiFi. Allowing this technology to be used without proving its safety is reckless in the extreme, as the millimetre waves are known to have a profound effect on all parts of the human body.”*

**-Prof. Trevor Marshall, Director Autoimmunity Research Foundation, California**

MMW (Millimetre Microwaves), at a short-range high intensity creating a yet more complicated denser soup of electro-smog. To work with the MMW in 5G, the antennas required are smaller. Some experts are talking about as small as 3mm by 3mm. The intensity is for efficiency and to deal with signal disruption from natural and man-made obstacles.

### **SKIN**

Our body has between two million to four million sweat ducts. When exposed to MMWs they act as a network of small antennas when exposed to these wavelengths. ” meaning that we become more conductive. 90% of the transmitted power is absorbed in the epidermis and dermis layer.”

The effects of MMWs as studied by [Dr Yael Stein](#) of Hebrew University is said to also cause humans physical pain as our nociceptors flare up in recognition of the wave as damaging stimuli. We’re looking at the possibility of many skin diseases and cancer, as well as physical pain to our skin.

## EYES

- In 1994 study found that low-level millimetre microwave radiation produced lens opacity in rats, which is linked to the production of cataracts.
- An [experiment](#) conducted by the Medical Research Institute of Kanazawa Medical University found that 60GHz “millimetre-wave antennas can cause thermal injuries of varying types of levels. The thermal effects induced by millimetre waves can apparently penetrate below the surface of the eye.”

**THE ATMOSPHERE AND DEPLETION OF FOSSIL FUELS:** implementation of the 5G global wireless network requires the launching of rockets to deploy satellites for 5G. These satellites have a short lifespan which would require a lot more deployment than what we’re currently seeing. A new type of hydrocarbon rocket engine expected to power a fleet of suborbital rockets would emit black carbon which “*could cause potentially significant changes in the global atmospheric circulation and distributions of ozone and temperature*” according to a 2010 [Californian study](#). Solid-state rocket exhaust contains chlorine which also destroys the ozone.

**The effects on the ozone are thought to be worse than current day CFC exposure.**

Google’s Project Loon is said to bring the Internet to rural and hard-to-access areas by using helium balloons. But these balloons only have a 10-month lifespan. We’re looking at a lot of helium being used here, more than what we can possibly have on Earth?

## DISRUPTION OF THE NATURAL ECOSYSTEM:

**BIRDS:** since the year 2000, there have been reports of birds abandoning their nests as well as health issues like “*plumage deterioration, locomotion problems, reduced survivorship and death,*” says researcher Alfonso Balmori. Bird species that are affected by these low levels, non-ionizing microwave radiation are the House Sparrows, Rock Doves, White Storks, Collared Doves and Magpies, among others.

And what of the [2016 UNESCO report by Mark Broomhall. detailing the exodus of species from the Mt. Nardi area of the Nightcap National Park World Heritage Area during a 15-year period \(2000-2015.\)](#)? What would 5G do to our local bird populations?

## BEEES

The declining bee population is also said to be linked to this non-ionizing EMF radiation. It reduces the egg-laying abilities of the queen leading to a decline in colony strength.

A study conducted by Chennai's Loyola College in 2012 concluded that out of 919 research studies carried out on birds, plants, bees and other animals and humans, 593 of them showed impacts from RF-EMF radiation. 5G will be adding to the effects of this electro-smog.

### **Fibre: solution**

I would like to conclude with a rather simple solution to 5G. Please invest taxpayers money into fibre optic cabling. Wired fibre optic connections are safer, faster, more reliable, provide greater, capacity, and are more cyber-secure. I have made myself read this report because I didn't want to just complain but ask you to consider an alternative.

"Reinventing wires: The future of landlines and networks" by Timothy Schoechle, PhD.

<http://electromagnetichealth.org/wp-content/uploads/2018/02/ReInventing-Wires-1-25-18.pdf>