I object strongly to the deployment of 5G technology based on the thousands of independently-reviewed scientific studies showing evidence that electromagnetic radiation (EMR) can cause harm.

Not one safety study has been undertaken to prove that the deployment of 5G technology is safe. Not one.

In 2011, the International Association for Research on Cancer (IARC) and the World Health Organisation (WHO) categorised wireless radiation as a 'possible' carcinogen (Group 2b); a cancer-causing substance.

EMF Experts such as Professor Emeritus Anthony Miller (long-time adviser to WHO) who was involved in the original WHO categorisation has since stated that there is now more than sufficient evidence to upgrade the classification of radio frequencies to a 'probable carcinogen' or that of a 'known carcinogen'. Professor Lennart Hardell another world class expert in this field has also made this statement.

Radiofrequencies fall into the same WHO category as DDT, tobacco smoke, diesel exhaust, welding fumes, formaldehyde and asbestos. Would we allow our children to sit in a classroom with these toxic mixtures? Never! But yet we allow mobile phones towers with 5G antennas to be installed right next to schools, hospitals and daycare centres and soon we will allow 5G routers into classrooms.

The potential effects of this man-made EMF on the naturally-occurring electromagnetic fields that our biology has evolved on has not been taken account of in our safety exposure limits. Our exposure guidelines only take account of heating (or thermal) effects on our body and they don't even do that very well as many mobile phones and devices exceed these guidelines on or near the body. These guidelines were established by ICNRIP in the 1990s long before wireless technology became the norm.

Doctors measure the natural mild electric field in our bodies using an ECG or EEG. How can we not be affected by 5G when we will be exposed to EMR millions of times greater than that on which we have evolved? The radiation we are being exposed to from man-made EMF today is millions of times greater than it was 25, or even 10 years ago. EMF Experts such as Professor Olle Johansson advises that with 3G technology alone we are surrounded by a quintillion times more EMR. When the 24-26Ghz and 60Ghz 5G frequencies come onboard it is clear from independent scientists that the impacts on our health will be huge.

These health effects include infertility, miscarriages, cancer, immune dysfunction, autoimmunity, foetal stress, anti-biotic resistant bacteria and much more.

Dr Martin Pall., PhD and Professor Emeritus of Biochemistry and Basic Medical Sciences at Washington State University is an authoritarian on the subject. He wrote a 90-page document on EMF effects and how they are produced in the body.

He says "Putting in tens of millions of 5G antennae without a single biological test of safety has got to be about the stupidest idea anyone has had in the history of the world".

In the report he states "there is a massive literature, providing a high level of scientific certainty, for each of eight pathophysiological effects caused by non-thermal microwave

frequency EMF exposures." This will include an unprecedented increase in many diseases, including:

- Widespread neurological and neuropsychiatric effects
- Oxidative stress and free radical damage central roles to all chronic diseases
- Blindness from each of the four major causes of blindness: cataracts, macular degeneration, glaucoma and retinal detachment.
- Hearing loss and tinnitus, leading to deafness
- Neurodegeneration and increased infertility
- Many types of cancer (single-strand and double-strand breaks) particularly in children as well as germ mutations affecting future generations
- Attacks on our endocrine/hormonal systems including autoimmune diseases
- Excessive intracellular calcium and excessive calcium signalling

Due to the large volume of independent research, the International EMF Scientist Appeal to the United Nations Environment Programme (250 peer-reviewed scientists representing 42 countries) has requested it reassesses the potential biological impacts of next-generation 4G and 5G telecommunication technologies to plants, animals and humans.

The sheer volume of quality scientific evidence available refutes the claim by International and Australian regulatory authorities (ICNIRP and ARPANSA) that the rollout of wireless technologies poses no health risks at the currently allowed exposure levels.

We also don't know enough about the effects on flora and fauna, or the atmosphere. In the last 25 years there has been a massive reduction in our global bee, insect and bird population, species that rely on the earth's magnetic field to navigate. We know from studies that when exposed to radio -frequencies bird migration is disturbed at very low levels, way lower than our regulations currently permit.

Recommendations

In light of the strong scientific evidence that 5G will bring about widespread illness to human health and adverse impacts to the environment, we call on our regulators to implement the precautionary principle.

The precautionary principle forms a statutory part of environmental regulation in Australia.

"When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically."

There needs to be a complete moratorium on the deployment of 5G technology until there is sufficient evidence based on long-term studies by independent scientists (not funded by the telecommunications industry) that there is no risk to human health or the environment.

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