Whilst we all love and embrace the benefits of technology, there is a need to look at both sides of this discussion.

For decades now, a volume of peer reviewed science has shown clear biological harm caused by wireless RF radiation. Please view the notes below on the reputable scientific studies.

There is a large number of highly reputable and credible scientific sites offering peer-reviewed, impeccable information on the health risks of EMF and RF radiation.

a few of these as examples:
(A)The Oceania Radiofrequency Scientific Advisory Association (ORSAA) the only independent scientific organization in the Australia- New Zealand region investigating the health risks of low-intensity radiofrequency electromagnetic radiation (RF-EMR), mostly microwave range RF-EMR generated for wireless communications and surveillance. Within a few years of inception, ORSAA has established the world's largest freely available categorised database of peer-reviewed scientific research on RF-EMR biological/health effects: www.orsaa.org. This database is intended to facilitate an evidence-based approach to risk assessment of wireless technologies. The ORSAA database currently contains over 3000 scientific studies sourced from all over the world. ORSAA is not funded by commercial entities and is therefore without any financial conflicts of interest.

(B)1. The internet information platform EMF-Portal of the RWTH Aachen University summarizes systematically scientific research data on the effects of electromagnetic fields (EMF). All information is made available in both English and German. The core of the EMF-Portal is an extensive literature database with an inventory of 29,381 publications and 6,446 summaries of individual scientific studies on the effects of electromagnetic fields.
The EMF-Portal is a project of the femu working group of the Institute and Out-patient Clinic of Occupational Medicine of the University Hospital RWTH Aachen. https://www.emf-portal.org/en

(C) NTP (National Toxicology Program) is the premier Institute in the world for developing information that can be used to determine human health risks. Their HQ is at the US National Institute of Environmental Health Sciences. NTP conducts studies at the requests of government agencies, universities etc. They report to the US Secretary of Health and Human Services.
They finished recently a 12-year-long study to determine the non-thermal effects of cell phone radiation and in their final conclusion established adverse health risks including tumors and cancer. Those findings were duplicated by the prestigious institute, in Italy.
Ramazzini Report
https://www.sciencedirect.com/…/artic…/pii/S0013935118300367

Government report on the recent $25 million peer reviewed NTP study
https://ntp.niehs.nih.gov/…/2…/march/actions20180328_508.pdf?

In the video link below, Professor Melnick explains articulate the process of NTP.
https://youtu.be/nJfK3gbkmMk

These sites have no vested nor conflict of interests.

Optus has been asking government to stomp the "misinformation" about the health threat.
This is extraordinary, it seems that Optus wants to engage our government in the censorship of any information which they consider a threat to their interest.
The Telcos are effectively asking for clear road with no objections nor debate so that they can continue to keep the public in the dark on the risks.

"For a quarter of a century now, the industry has been orchestrating a global PR campaign aimed at misleading not only journalists, but also consumers and policymakers about the actual science concerning mobile phone radiation.
Indeed, big wireless has borrowed the very same strategy and tactics big tobacco and big oil pioneered to deceive the public about the risks of smoking and climate change, respectively. And like their tobacco and oil counterparts, wireless industry CEOs lied to the public even after their own scientists privately warned that their products could be dangerous, especially to children. »
https://www.theguardian.com/technology/2018/jul/14/mobile-phones-cancer-inconvenient-truths

The achievements of the tobacco industry in manipulating science led Judge Gladys Kessler to confirm a verdict of racketeering that included manipulating institutions such as the American Medical Association and National Cancer Institute — both of which at various times worked to build a safe cigarette.

The telecommunications industry uses the same PR strategies, some of the same industry consultants and scientists to promote disinformation in defense of their addictive products.

Further, in 2015 a Harvard expose tracked the revolving door between the FCC and the telecom industry and concluded that the FCC is a captured agency and that "Consumer safety, health, and privacy, along with consumer wallets, have all been overlooked, sacrificed, or raided due to unchecked industry influence."

When it comes to downplaying the potential risks of wireless radiation, the telecom industry makes the tobacco industry look like rank amateurs.
They have successfully influenced the regulators, internationally (by funding ICNRIP and the WHO EMF project) and locally ARPANSA, who have affiliates with ICNIRP.
ICNRIP is a private NGO, based in Munich, a self-appointed small closed club of scientists, who are industry friendly. They are unaccountable to anybody. The safety standards have been set to protect the industry's interests and not public health.

A must-read article from this respected medical science site by Professor Lennart Hardell exposes the WHO EMF project and ICNIRP links to the industry they are meant to regulate.
https://www.spandidos-publications.com/10.3892/ijo.2017.4046

Despite the above dismissive assurances about the lack of risks from 5G networks there are a number of very concerning health issues with 5G that give weight to community concerns.

Next time Telcos make such statements as " the technology is safe " or "there is no adverse risk", it would be more credible to show balance when reporting this issue and report on 'The other side of the argument': the fact that the independent scientific community at large is concerned by the densification of electro emissions .
There are many appeals to governments and the UN by Professors, doctors and scientists.

The question is why are these expert doctors and scientists ignored?

As an example this important event is ignored by the press:
New York, NY, July 22, 2019. The Advisors to the International EMF Scientist Appeal, representing 248 scientists from 42 nations, have resubmitted The Appeal to the United Nations Environment Programme (UNEP) Executive Director, Inger Andersen, requesting the UNEP reassess the potential biological impacts of next generation 4G and 5G telecommunication technologies to plants, animals and humans.

There is particular urgency at this time as new antennas will be densely located throughout residential neighborhoods using much higher frequencies, with greater biologically disruptive pulsations, more dangerous signaling characteristics, plus transmitting equipment on, and inside, homes and buildings. The Advisors to The Appeal recommend UNEP seriously weigh heavily the findings of the independent, non-industry-associated EMF science.

The Advisors to the International EMF Scientist Appeal - Annie Sasco, MD, Dr.PH., Henry Lai, Ph.D., Joel Moskowitz, PhD., Ronald Melnick, Ph.D. and Magda Havas, Ph.D., call upon the UNEP to be a strong voice for the total environment of the planet, and an effective catalyst within the United Nations with regards to the biological and health effects of electromagnetic pollution.

The complete Press Release is here and it links to the recent letter to the UN Environment Programme (UNEP)

https://www.emfscientist.org/EMF_Scientist_Press_Release_22…

As 5G is driven by the telecoms supply industry, and its long tail of component manufacturers, a major campaign is under way to convince governments that the economy and jobs will be strongly stimulated by 5G deployment...
Denying the actual science could prove to be more costly.

I would also appreciate a response as I have spent my morning writing this submission for your independent information and would welcome your feedback.
Many thanks
Yours Sincerely

References Science

Miller, A.B., Environmental Research (2018), A recent published paper. CONCLUSION is that RFR should be categorized as carcinogenic to humans (IARC Group 1):
It was classified Group 2 in 2011.

https://lookaside.fbsbx.com/file/MilleretalEnvRs2018.pdf…
Microwave frequency electromagnetic fields (EMFs) produce widespread neuropsychiatric effects including depression:
Journal of Chemical Neuroanatomy
https://www.sciencedirect.com/…/artic…/pii/S0891061815000599

Appeals by Doctors and Scientists
(1) Belgium
350 Belgian doctors call the alarm and ask, among other things:
- application of the principle of the precautionary principle for 5 G
- Health impact studies before the deployment of new wireless telecommunication technologies, including 5 G,
- and the implementation of resolution 1815 of may 2011 of the parliamentary assembly of the council of Europe

The medical community is expressing its position for the protection of the population against the 5 G and the exponential evolution of radiofrequency radiation.

https://www.hippocrates-electrosmog-appeal.be/appel

(2) Cyprus

The Pancyprian Medical Association and Cyprus National Committee on the Environment and Child Health submitted a position paper on 5G entitled “The Risks to Public Health from the Use of the 5G Network” to the Cyprus Parliamentary Committees on Environment and Health. The position paper is based on the historic Nicosia Declaration of 2017. This action comes at the same time that hundreds of doctors in Belgium signed onto an appeal to halt 5G.

The position paper emphasizes the lack of safety studies, the increase in exposure and the potential interactions of the network with other telecommunication networks. The paper also highlights the lack of a reliable method to measure the radiation levels in real world situations- an issue that was raised in the 2019 European Parliament Report “5G Deployment State of Play

in Europe, USA and Asia" which states that, " the problem is that currently it is not possible to accurately simulate or measure 5G emissions in the real world."

"Who will be responsible for any immediate and especially long-term health impacts?"

https://ehtrust.org/cyprus-medical-and-childrens-health-associations-submit-5g-position-paper-to-parliamentary-committees/

(3) Canada, doctors Media Press conference https://youtu.be/S16QI6-w9I8

(4) UN Space APPEAL signed by 1000s of international doctors and scientists and citizens https://www.5gspaceappeal.org/the-appeal

DID YOU KNOW? EMFs are not insurable
Insurers have Electromagnetic Fields "Exclusions, and refer to EMF as a POLLUTANT

"Pollutants" means: Any solid, liquid, gaseous, or thermal irritant or contaminant including smoke, vapor, soot, fumes, acid, alkalis, chemicals, artificially produced electric fields, magnetic field, electromagnetic field, sound waves, microwaves, and all artificially produced ionizing or non- ionizing radiation and waste.

Vertiv. (2019). *5G: The Risks and Rewards for Operators*. Retrieved from https://www.vertiv.com/en-asia/about/news-and-insights/articles/white-papers/5g-the-risks-and-rewards-for-operators/

Warnke, U. (2009). *Bees, Birds and Mankind: Destroying Nature by" electrosmog"*: E. Oppenheimer and Sons.

World_Cancer_Resarch_Fund. (2018). *Global cancer data by country*. Retrieved from https://www.wcrf.org/dietandcancer/cancer-trends/data-cancer-frequency-country

Xiao, H., & Oughstun, K. E. (1999). Failure of the group-velocity description for ultrawideband pulse propagation in a causally dispersive, absorptive dielectric. *JOSA B, 16*(10), 1773-1785.

Albanese, R., Blaschak, J., Medina, R., & Penn, J. (1994). *Ultrashort electromagnetic signals: Biophysical questions, safety issues and medical opportunities*. Retrieved from

Bandara, P., & Carpenter, D. O. (2018). Planetary electromagnetic pollution: it is time to assess its impact. *The Lancet Planetary Health, 2*(12), e512-e514.

Bandara, P., & Weller, S. (2017). Biological effects of low-intensity radiofrequency electromagnetic radiation—time for a paradigm shift in regulation of public exposure. *Radiat Protect Australas, 34*, 2-6.

Centre for Energy Efficient Communications. (2015). *The power of wireless cloud*. Retrieved from https://ceet.unimelb.edu.au/publications/ceet-white-paper-wireless-cloud.pdf

EMF-Portal. (2019). Retrieved from https://www.emf-portal.org/en

European Parliamentary Assembly. (2011). *The potential dangers of electromagnetic fields and their effect on the environment*. Council of Europe Retrieved from http://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=17994

Firstenberg, A. (2018). International Appeal: Stop 5G on earth and in space. Retrieved from https://www.5gspaceappeal.org/about

International Agency for Research on Cancer. (2011). IARC classifies radiofrequency electromagnetic fields as possibly carcinogenic to humans [Press release]. Retrieved from https://www.iarc.fr/wp-content/uploads/2018/07/pr208_E.pdf

International Agency for Research on Cancer. (2019). Advisory Group recommendations on priorities for the IARC Monographs. *The Lancet Oncology, April*. Retrieved from https://www.thelancet.com/action/showPdf?pii=S1470-2045%2819%2930246-3

Jones, D. (2019). Power Consumption: 5G Basestations Are Hungry, Hungry Hippos [Press release]. Retrieved from https://www.lightreading.com/mobile/5g/power-consumption-5g-basestations-are-hungry-hungry-hippos/d/d-id/749979

Lázaro, A., Chroni, A., Tscheulin, T., Devalez, J., Matsoukas, C., & Petanidou, T. (2016). Electromagnetic radiation of mobile telecommunication antennas affects the abundance and composition of wild pollinators. *Journal of insect conservation, 20*(2), 315-324.

Maisch, D. (2019). 5G: Eco-Energy or Energy Monster. Retrieved from https://www.emfacts.com/2019/06/5g-eco-energy-or-energy-monster/

Markov, M. (2018). *Mobile Communications and Public Health*: CRC Press.

National Toxicology Program. (2018). *High exposure to radio frequency radiation associated with cancer in male rats*. Retrieved from https://www.nih.gov/news-events/news-releases/high-exposure-radio-frequency-radiation-associated-cancer-male-rats

Neufeld, E., & Kuster, N. (2018). Systematic derivation of safety limits for time-varying 5G radiofrequency exposure based on analytical models and thermal dose. *Health physics, 115*(6), 705-711.

ORSAA. (2019). Retrieved from https://www.orsaa.org/

Oughton, E., Frias, Z., Russell, T., Sicker, D., & Cleevely, D. D. (2018). Towards 5G: Scenario-based assessment of the future supply and demand for mobile telecommunications infrastructure. *Technological Forecasting and Social Change, 133*, 141-155.

Patton, L. (2019). My New Year's Resolution – Keep fighting for #BetterBroadband. Retrieved from http://theluckygeneral.biz/2019/01/06/my-new-years-resolution-keep-fighting-for-betterbroadband/

Russell, C. L. (2018). 5 G wireless telecommunications expansion: Public health and environmental implications. *Environmental research, 165*, 484-495.

Smith-Roe, S. L., Wyde, M. E., Stout, M. D., Winters, J. W., Hobbs, C. A., Shepard, K. G., . . . Tice, R. R. (2019). Evaluation of the genotoxicity of cell phone radiofrequency radiation in male and female rats and mice following subchronic exposure. *Environmental and molecular mutagenesis*.

The Parliament of the Commonwealth of Australia. (2001). *Inquiry into Electromagnetic Radiation*. Retrieved from https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Completed_inquiries/1999-02/emr/report/index

Thielens, A., Bell, D., Mortimore, D. B., Greco, M. K., Martens, L., & Joseph, W. (2018). Exposure of insects to radio-frequency electromagnetic fields from 2 to 120 GHz. *Scientific reports, 8*(1), 3924. Retrieved from https://www.nature.com/articles/s41598-018-22271-3.pdf

of Things (IoT), Smart Cities or other technological developments dependent on digital connectivity. (Oughton et al., 2018 p.1.)

This issue has also been raised by the ex-CEO of Internet Australia (Patton, 2019).

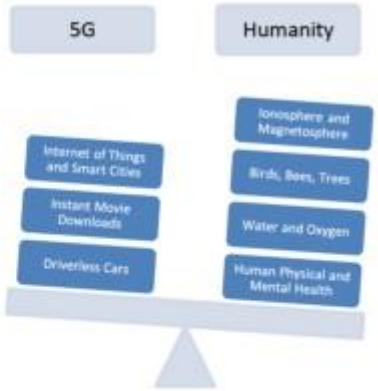
Summary and Recommendations

ORSAA's major concern is the evident harm to the mental and physical health of the current and next generations, as well as the likely harm that is forecast by experienced scientists in this field for our planetary stability and ecosystems.

Given the high risks involved, there is an urgent responsibility to the public for the Australian government to disallow further increases in the population's exposure to RF-EMR with the proposed 5G technologies. Scientists at ORSAA therefore recommend that:

- The Australian government immediately halt the 5G deployment due to the serious risk to public health and planetary health.
- Australia adopt the **ALARA (As Low As Reasonably Achievable)** principle with respect to RF-EMR exposure and **Prudent Avoidance** of RF-EMR exposure for children and pregnant women in order to protect vulnerable children and foetuses.
- Safer alternatives available such as fibre and cable be used and regulations put in place to enforce such safe technologies in all educational settings, hospitals and all public places
- Australian citizens be given the right to refuse exposures to EMF-RF in their home, at work or the marketplace.
- The Australian government establish an organisation to monitor and advise on EMF exposures, that is independent of industry and comprised of suitable expertise in biophysics, medical research and with knowledge of the effects of EMRs on neuropsychology and neuropsychiatry. Engineers and physicists are not qualified to make informed decisions about health effects.

In the balance we have the needs of industry to promote its own growth and development and the push to 'innovate' versus the serious risks to humans and the planet. We implore the committee to consider what is in the balance, and the responsibility of the government to protect its people and the environment. RF-EMR is a biologically damaging agent akin to ionizing radiation and non-ionizing UV radiation. It is not possible that RF-EMR will ever be 'proven' safe but substantial evidence of harm is already here. What is required now is the political will to address the scientific evidence in a prudent manner with public health protection a prime mainstay instead of economic interests. An unhealthy population would significantly impact Australia's economy and social structure.



ORSAA offers our cooperation and assistance with this review process and look forward to hearing from the committee concerning any or all of the above issues that we have raised.

Yours sincerely,

[redacted]

Dr. Julie McCredden
ORSAA President

2 Effects on eyes (including cataracts), heart rate, immune system and DNA have been shown.
3 Millimetre waves can also affect important components of skin such as nerves, immune cells, blood vessels causing systemic effects involving internal organs. It has been found that sweat ducts of skin act as helical antennae for millimetre waves.
4 Due to the pulses from 5G phased arrays, the moving charges within the body become tiny antennas. They then reradiate waves called 'Brillouin Precursors' deeper into the body (Albanese, Blaschak, Medina, & Penn, 1994), which become dangerous with rapid changes in power or phase of the waves (Xiao & Oughstun, 1999) as will occur with 5G.

Risk of harm to birds, bees and insects

Microwave radiation is already having effects on birds, bees and pollinators (Bandara & Carpenter, 2018; Lázaro et al., 2016; Warnke, 2009). Moreover, insects will maximally absorb 5G radiation due to the length of their bodies being measured in millimetres and the subsequent resonance effects (Thielens et al., 2018). Therefore, 5G radiation could have catastrophic effects on the already endangered insect populations worldwide, which has implications for Australian agriculture and for global food supplies.

Harm to earth's atmosphere

Together, the earth, the ionosphere and the lower atmosphere form a global electric circuit that controls the biological rhythms of humans, birds and animals. These rhythms are essential for life, affecting blood pressure, the sleep-wake cycle, reproductive, cardiac, and neurological systems. To enable 5G, tens of thousands of satellites will be placed in both the ionosphere and magnetosphere, sending signals at millions of watts. When these powerful man-made signals are imposed on the natural background EMFs they are likely to alter the electromagnetic environment significantly, and may be very damaging to all life on earth (Firstenberg, 2018). In addition, the engineering literature is clear that the high frequency waves proposed for stage 2 of 5G communications will create quantum level changes in the rotational energy of water (at 22.3Ghz, 33GHz, 323 GHz) and oxygen molecules (at 60 GHz). Given these molecules are the basis of life, the effects of altering the fundamental characteristics of water and oxygen are likely to be inimical to life on earth.

Unsustainable: significant increases in energy burden promoting global warming

While industry expects that each 5G device will use less power, it also expects that there will be millions more connections and devices. The maths therefore predicts that overall, power consumption of 5G will make greater demands on the earth's resources than ever before. The Centre for Energy Efficient Communications White Paper (2015) points out that wireless systems use 15 to 23 times more energy than wired systems, and that up to 90% of this energy is used by wireless network technologies. Furthermore, according to Zhengmao Li of EVP China Mobile, the challenges of 5G deployment are that (i) 5G needs three times the number of base stations for the same coverage as LTE, and (ii) the power consumption of one 5G base station is three times the power consumption of 4G LTE (Jones, 2019). A recent online report which surveyed more than 100 telecommunications decision makers (Vertiv, 2019) found that 5G technology will likely increase total network energy consumption by 150 to 170 per cent by 2026.

> *... 5G is going to be significantly more energy-intensive than previous generations of wireless connectivity .. extra efficiency measures will need to be taken to ensure a worthwhile investment...*

(see Maisch (2019) for a full summary of this report).
With humankind facing a global warming and global energy crisis, the move to expand energy consumption for more unnecessary technology is both reckless and irresponsible.

The deployment of 5G is not financially secure

The engineering literature on 5G raises concerns about the ability of industry to finance 5G deployments and infrastructure. As well as the increased costs of energy consumption, 5G base stations cost four times the price of LTE (Jones, 2019). It appears that the push to encourage 5G cities and the driverless car industry is a strategy by industry to bring countries on board in order to cover the costs of 5G deployment:

> *...small cell deployments provide significant capacity but at considerable cost, and hence are likely only in the densest locations, unless MNOs can boost revenues by capturing value from the Internet*

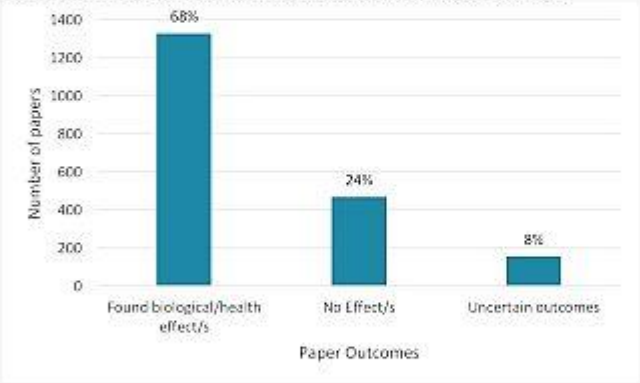
Risk of other adverse health effects

The broad categories of RF-EMR effects found in the scientific literature are compiled within the ORSAA database (www.orsaa.org). The papers in these categories reveal the following major health risks:

- neurodevelopmental disorders in children
- neurodegenerative diseases in adults such as dementia, multiple sclerosis, Parkinson's disease
- neuropsychiatric/neurobehavioural problems including memory problems, anxiety, depression, insomnia and resulting fatigue
- lowered fertility and serious damaging effects on reproductive tissue and sperm
- immune diseases/disorders such as allergies, atopic dermatitis and autoimmune diseases
- metabolic diseases arising out of sustained disruption to basic cellular functions such as mitochondrial dysfunction.

A cross sectional study of 1,955 scientific experimental studies within the ORSAA database (laboratory studies and population-based studies examining biological and health effects of RF-EMR exposures) revealed that the majority of papers (68%) show significant biological or health effects, as summarized in Figure 1 below. Notable are the large numbers of papers showing harm caused by oxidative stress, a pathological phenomenon which is involved in many chronic diseases such as cancer, heart disease, diabetes and which underlies mental illnesses such as depression and Alzheimer's disease. Furthermore, oxidative stress provides a clear mechanism for how existing mobile technologies can cause harm to health, which lays to waste the claims that no scientific mechanism has been found.

Figure 1: *Pattern of results from papers in the ORSAA database (n=1955)*



This clear weight of evidence refutes the widely-held claim that wireless technologies pose no health risks. Typical RF-EMR exposures experienced by Australians on a daily basis fall within the permitted 'safety' levels as advised by ARPANSA. However, the evidence shows that typical exposures can induce oxidative stress in cells leading to many chronic health conditions in the exposed population. These findings call for an immediate *reduction* in the allowable RF-EMR exposure levels (Bandara & Weller, 2017). Instead, with no heed to the current evidence, the industry is marching on to add 5G frequencies into the mix.

Evidence for health effects from 5G frequencies

While the existing large volume of scientific studies show clear health risks with the frequencies used in the first phase of 5G deployment, very little research has been done so far on the health effects of millimetre waves to be used for the second phase of 5G (6 to 86 GHz). The existing review papers (Oughton, Frias, Russell, Sicker, & Cleevely, 2018; Russell, 2018) reveal the current known effects of these waves:

1 Despite shallow penetration (compared to lower frequencies) 5G millimetre waves pose harm to the largest organ of the body, the skin, with the possibility of permanent tissue damage (Neufeld & Kuster, 2018).

ORSAA
Oceania Radiofrequency Scientific Advisory Association

Submission to the Australian Federal Parliament's House of Representatives Standing Committee on Communications and the Arts: Inquiry into 5G mobile telephony

This submission by ORSAA[1] addresses the deployment, adoption and application of 5G technologies in Australia. It specifically refers to the committee's terms of reference: Investigate the capability, capacity and deployment of 5G. ORSAA has identified the following serious issues in relation to the proposed deployment of 5G in Australia:

Harm to human health and likely wider harm to the environment, as well as alterations of atmospheric physical and ecological systems.

At the turn of the century the Australian Senate conducted an inquiry into the health effects of electromagnetic radiation (Commonwealth of Australia, 2001) when the scientific evidence for harm was uncertain. Since then, the evidence for harm has become clearer, so that parliaments across the world have been calling for precaution due to the serious risks (e.g., European Parliamentary Assembly, 2011). These risks are described in more detail below.

Environmental Health Risks

When addressing the risks, the exposure agent associated with 5G must be considered; i.e., Radio Frequency (RF) radiation which is part of the of electromagnetic (EMR) spectrum that uses man made, continuous, pulsed and modulated signals based on frequencies from long AM radio waves through to millimetre length microwaves (just below infra-red and visible light). The prevalence of this agent (RF-EMR) in our environment has increased enormously in recent decades with toxic effects demonstrated for living organisms and serious possible harm posed for environmental systems. Furthermore, energy requirements are estimated to increase by at least a factor of three. With Australia's existing energy supply problems being unknown, it is unclear how we will be able to cope with this demand.

Risk with respect to cancer

The entire RF-EMR spectrum (including AM/FM range radio waves, and microwaves) was classified by the WHO's International Agency for Research on Cancer (IARC) as a Group 2B Possible Carcinogen in 2011 (International Agency for Research on Cancer, 2011). The US National Toxicology Program has recently provided clear evidence of carcinogenicity and DNA damage associated with exposure to RF-EMR (National Toxicology Program, 2018; Smith-Roe et al., 2019). This new evidence strengthens thousands of scientific studies that have been conducted over the decades which show adverse biological/health effects of RF-EMR (e.g., EMF-Portal, 2019; Markov, 2018; ORSAA, 2019). The IARC (2019) has recently announced that RF-EMR needs to be re-evaluated with high priority. According to the latest findings by the World Cancer Research Fund (2018) Australia now has the world's highest incidence rate of cancer.

---

[1] The Oceania Radiofrequency Scientific Advisory Association (ORSAA) is the only independent scientific organization in the Australia-New Zealand region investigating the health risks of low-intensity radiofrequency electromagnetic radiation (RF-EMR), mostly microwave range RF-EMR generated for wireless communications and surveillance. Within a few years of inception, ORSAA has established the world's largest freely available categorised database of peer-reviewed scientific research on RF-EMR biological/health effects: www.orsaa.org. This database is intended to facilitate an evidence-based approach to risk assessment of wireless technologies. The ORSAA database currently contains over 3000 scientific studies sourced from all over the world. ORSAA is not funded by commercial entities and therefore without any financial conflicts of interests.