

On the 19th of March 2020 the Byron Shire became the first Council in Australia to call for a moratorium on a 5G upgrade. This precedent pertains to a tower at 93-95 Dalley Street, Mullumbimby NSW.

The Stop 5G Northern Rivers (NR) group worked closely with Environment & Community Safe From Radiation (ECSFR), to set this precedent. The NR group engaged with hundreds of local community members during 11 months, to lobby Council to call for a moratorium.

This Strategy Kit is a compilation of actions that the core administrators from the NR group implemented to deliver the result. It's a practical guide that can be used to engage with the Community, Council, Members of Parliament, Doctors & Telcos. The Stop 5G movement references expert scientific research and calls for a halt on the roll-out. We are demanding comprehensive safety testing be undertaken immediately, including the cumulative effects of radio frequency electromagnetic radiation from all sources; by independent scientists with no ties to the Telco industry.

We are advocates for public health, wildlife safety and environmental protectors.

INTRODUCTION

5G has galvanised grassroots communities in Australia and globally into action, with a momentum that is truly astounding. There are literally tens of thousands of YOU around Australia, that do not consent to the 24/7 onslaught of radiofrequency electromagnetic radiation (RF EMR) that 5G will bring in to our communities. At the time of compiling this Strategy Kit, while people in many countries around the world are in the throes of a Covid-19 lockdown, the 5G roll-out has been accelerated.

Despite a huge body of independent scientific evidence showing the negative effects of RF EMR, those in power have chosen to ignore, deny or even destroy these inconvenient truths until NOW!

The simple fact remains that health is a fundamental human right. We, our children, animals and plants need to be adequately protected. Commercial interests can no longer be prioritised. Industry and governments must be held accountable, or the damage for all of us will be catastrophic and irreversible.

So, as we face the might of a trillion-dollar industry, the question remains: what can we do?

You're reading this Strategy Kit because you – and the community you represent – have chosen to ACT. Contrary to what we might be told, we are powerful. There are many examples of communities around the world, who have succeeded in putting the brakes on 5G and that list is growing. We've put this kit together because Stop 5G groups around Australia have asked us to share our strategies, resources and insights. Like all of you, we have no certainty what results our ongoing campaign will bring, but we'll certainly keep going.

The list of templates, samples and resources you'll find here is a collective effort, compiled with the help of the Northern Rivers crew predominantly. It's with great respect and a SPECIAL THANK YOU to the many groups and individuals who contributed to this kit: ECSFR, Australasian Society of Building Biologists, NO5G Australia, WeAreNotSAM, Stop 5G Tweed Shire, Stop5G Australia, We Say NO To 5G in Australia and Dr Murray May for the specific content and collaboration. To the wider Stop 5G Movement and groups around Australia **THANK YOU** for the endless inspiration and support.

How do you use this kit? Please diligently cut and paste information to a new WORD document and ensure you update YOUR Council's name correctly. Any footnotes will paste over automatically. This pack is addressing the Byron Shire Council and will need to be updated in many places in the templates. You need to be clear and accurate about what you and your community are objecting to: is it a proposal to build a new mobile phone base station, upgrade an existing base station to 5G or install a small cell on a utility pole or building?

No matter where you are in your journey of 5G and the complexity of what it entails, you are embarking on and undertaking very important work for humanity and our planet! Volunteering to help stop the 5G roll-out is not an easy task. You will need to become very informed on many confronting issues, your habits and way of life will come under question and many relationships will be forever impacted by you standing up and using your voice. There is no better time to dive on in, as silence is most definitely regarded as consent.

Power is with the People,

The Stop 5G Northern Rivers NSW - Core Group

Email: stop5gnr@protonmail.com

P.S. While a lockdown and social distancing will create some challenges in presenting in person to Council and collecting hand-signed petitions... where there is a will there is a way. Be creative, be resourceful and use this time effectively while many people have extra time to check emails, use social networking and talk via video conferencing. Councils will be allowing Public Access presentations remotely and you can request that your community sign petitions via Apps such as Adobe Fill & Sign and return them via email for printing.

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"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."

-Martin Pall, PhD, Molecular Bioscientist, University of Washington



HOW TO HALT A NEW TOWER

Prior to embarking on the journey of addressing your local Council, it is strongly recommended that you familiarise yourself with the **ECSFR website** with particular focus on the 'Take Action' section of the website and 'How to Stop a Telco Tower':

<https://ecsfr.com.au/take-action-2/>

Supply your local Council with the meeting minutes from the Planning Department of the Byron Shire Council that advised the Council to halt the Wilson's Creek Tower development in September 2018:

Click on **STEP 8** – Follow the DA process (letter attached): <https://ecsfr.com.au/take-action-2/>

When preparing for your Council presentation use the speech template

Click on **STEP 9** – Speaking Against the DA (Legal brief reminding Council): <https://ecsfr.com.au/take-action-2/>

This speech was delivered by the Chairman of ECSFR, directed to the Planning Department of the Byron Shire Council. Please use this information to educate your Council face to face.

Respectful and personable human interactions is what will allow us to connect and help each other with this crisis unfolding locally, nationally and globally.

WHAT THE BYRON SHIRE IS DOING TO STOP 5G

An urgency motion was unanimously passed by the Byron Shire Councillors on the 19th March 2020

That Council does not currently support the proposed upgrade that will facilitate 5G technologies and continues to support a moratorium on the installation of 5G technology infrastructure until the previously requested information is provided, including:

- a) identification of and commitment by a State or Federal Government body to do a comprehensive review of the cumulative impacts of the 5G technology,*
- b) identification of who holds responsibility for the on-going monitoring of any cumulative impacts,*
- c) commitment from the State Government to review the current planning processes for the installation of small cells and consideration of any possible improvements.*

Council minutes: https://byron.infocouncil.biz/Open/2020/03/PLAN_19032020_MIN_1154.PDF

Council meeting 25 mins: <https://www.youtube.com/watch?v=0E2qIQmslwl&t=2s>

Council vote 2 mins: <https://youtu.be/0E2qIQmslwl>

WHAT COMMUNITIES CAN DO TO HALT 5G: FIRST STEPS

1. Organise a core team of administrators between 5-8 people is most effective; anymore and the decision-making process is compromised and any less and the workload can become too much.
2. Create an online presence within your community using social media platforms such as Facebook or Instagram. Join community pages in preparation for both education and inspired action within the community.
3. Use the RFNSA (Radio Frequency National Site Archive) website to search for Australian Mobile Network base stations to find Electromagnetic Energy (EME) Reports and site locations in your area. Subscribe to the RFNSA notification service by entering your relevant postcode (<https://www.rfnsa.com.au/subscribe>). This is a very important first step as you will be notified of proposed 5G upgrades and new towers in your subscribed postcode.
4. Scan for “public notice” signs that notify the community of an imminent upgrade to a mobile phone tower or installation of a ‘low impact’ device. These may appear in local newspapers for Telstra/ Optus/ Vodafone ads or public notice signs may be placed by Telcos at tower sites and on locations where “small cells” can be installed, such as street lights, power poles, rooftops and sides of buildings.
5. When notification of a proposed installation is published, the public have 10 business days to submit an objection (C564: 2018 Mobile Phone Base Station Deployment). A letter will need to be drafted listing reasons the community object to the proposed installation (example objection submission included in Kit).
6. If you are objecting a specific upgrade or new tower, target the area for petitions within a 500m radius. Pin the tower address in a map and create a 500m radius around the tower. The objectors in this catchment area are who carriers consider the most, during the “community consultation” process.
7. Distribute educational material in your local area and include the residents and businesses close to the tower site (500m radius). Mobilise volunteers to do a 5G flyer drop or pay Australia Post to also deliver, if the area is more rural or access is difficult (at this time). 5G Flyer template at the bottom of this kit..
8. Create an online petition and print a paper petition (template included in Kit). The online petition can be used to distribute updates and calls for action. The paper petition is necessary to supply to Council (original copies hand delivered) photocopies to be sent to carrier (Telstra, Optus etc) via registered post. IMPORTANT that all petitions have ALL details included accurately, such as name, address and dated with the year 2020. You will need to explain to residents that a mobile phone tower ‘upgrade’ is proposed, how it will affect them, and request they sign a petition, including online petitions.
9. Contact businesses close to the tower, via phone, email or in person. Request a short survey (template provided in kit) and this will be used to get a percentage of businesses that object to 5G in your local area. Ask businesses to sign a petition also.
10. Phone your council and ask them for a copy of the DA or the development application for a new tower or upgrade. We have the right to this information. Please note, that the Department of Education, recommends that towers be distanced from schools up to 500m from the school boundary.
11. Submit the objection (example provided in the kit) and the petitions to your local and federal MPs, Council and the telecommunications carrier proposing the installation. Wait ten days for a reply.
12. If you are dissatisfied with the reply or don't receive one, you can submit a complaint to the ACMA (Australia Communications and Media Authority: <https://www.acma.gov.au/>). In response to complaints from residents, ACMA have issued formal warnings to mobile carriers for failing to meet their obligations under the *Mobile Phone Base Station Deployment Code*, which requires consultation with residents.

COMMUNITY ENGAGEMENT & STRATEGIC PLAN

This checklist may or may not be relevant to your community, as it really depends on what the level of engagement has been to date. This strategic plan was developed and delivered by a core Administration group of approximately 5-8 people that changed over time, during one year. The whole Stop 5G movement is a lot more established and cohesive now in terms of communication, strategy and content sharing than a year ago.

The major sequence of events in the Byron Shire proceeded as follows:

- 5G Flyer 10,000 copies distributed
- Rally
- Media exposure was consistent throughout
- 1st Council presentation
- Information sent to Council
- Community Q&A
- Petitions online and paper copies collated
- Formal Telstra Objection submitted
- Objection shared with Council and local MPs
- Social Media campaign requesting direct action via email to Council, telco and MPs
- Sent more information to Council requesting URGENT assistance on behalf of the community.
- 2nd Council Presentation
- Paper petitions delivered to Council

Create a localised Facebook group

- Ask all members to invite their friends as a “call to action” to grow the page.
- Keeping the page closed is easiest while Administrators are getting use to the group dynamic and platform.
- Zero tolerance for trolling as it takes a lot of energy and time to manage.
- Closely moderate member requests for authenticity, connection to the area or member friends (in other words don't accept suspect requests).
- Share the groups Mission Statement and Guidelines.
- 3-5 Administrators/Moderators are needed to manage the group while it is growing.
- Support respectful dialogue and redirect Members enquiries when able.
- Keep the page as educational and action driven as possible.
- Steer clear of any controversial off topic themes that may alienate members. Set posts for admin approval to keep the quality of information focused on EMR awareness and education.
- Local administrators reach out to the National Groups and get on board and involved in the broader National campaigns.

Action Group Meeting #1

- Advertise an Action group meeting on the FB page. Be clear it's not an info session. A smaller group is best to begin with (from 5-8).
- Round table introduction style and ask members to highlight their skill set and what has called them to the meeting.
- Take meeting minutes.
- Collate a list of ideas and tasks to be actioned over the coming weeks (flyer drop, poster design and venue booking for larger meeting).
- Gather all contact details and pick a date to meet again.

Create a Communication thread for the core administrators

- Consider alternatives to Messenger for security (Signal, Telegram, Discord etc)
- Share minutes of the meeting.
- Share follow-up of ideas and tasks.
- Cross-check flyer content and poster styles with the core admin (template in kit – to customise you can email georgie.coghlan@gmail.com)
- Pre-organise printing so it can be distributed to members at the next Action meeting (a few hundred copies at least).

Call to Action Meeting #2

- Create an Event page on FB and share with the wider Stop 5G members on the local FB page.
- Be clear this meeting is for action and prepare key speakers to address the larger meeting.
- Film the meeting speeches for archival records and to upload to FB to engage the wider community that did not attend the meeting.

- Outline the different Action Groups that will be needed and ask that members volunteer for different positions (Secretary, Fundraising/Treasurer, Events, Multimedia, Communications/Media, Ground Force, Research).
- Pick a date for a **Council Rally** around the next **General Council Meeting** date.
- Pick a date for the **Community Hearing Q&A** that falls after the General Council Meeting.
- **IMPORTANT** – this is the first fundraising event, hand a bucket around for printing donations (it should cover the flyer printing that was just paid for).

Multimedia and Communication Teams

- Plan to document/film and live-stream all events if appropriate.
- Send out Press Releases to local news stations, radio, newspapers and Council).

Ground Force Team

- Organise market stalls at the local farmers markets and weekend markets (ask for free stalls for community education).
- Ground Force to become familiar with the FAQs questions in this kit and collect petitions.
- Grid local maps and strategically distribute the 5G flyer.
- If funding permits you can pay for additional distribution through Australia Post in rural areas.

Facebook group page

- Daily calls to action: email the local Mayor voicing concerns, contact local schools voicing concerns about Wifi in the classrooms, contact ARPANSA with concerns, contact Telcos with concerns, tell 5 people about 5G, gather signed petitions etc.
- Create Event Page on FB for Rally and share widely with an open setting on the event.

Rally

- Film event
- Quality PA for sound
- Invite community engagement; chanting, drumming, give space for the community to use their collective voice.
- Rally speech available (below)
- Choose a prominent location for the Rally (outside Council or a telco headquarters)
- Fundraise with a bucket for donations and ask Rally members to sign the petition.

Present to Council

- Arrange filming if permitted for archival footage.
- Determine if the time available is a short public access (5 minute per speaker or per topic).
- Negotiate a longer presentation if possible.
- Council speech available (below)

Community Hearing Q & A

- Film and live-stream event for members unable to attend.
- Fundraise with a bucket for donations and sell raffle tickets.
- Engage with community and ask them to sign the petition.
- Organise all technical needs for PowerPoint presentations, PA for speeches, handheld mic for audience questions.



MEDIA PRESENCE

Try to appoint someone as a Media Coordinator

- Their role will be attracting media to key events. This was pivotal in increasing awareness amongst the more mainstream community. Media coverage also kept the pressure on, especially with Council and ARPANSA.
- The most successful media coverage stemmed from the Rally and the Radiation Reading at Patterson St, Byron Bay.
- Rally (numbers are crucial, the more in attendance and the noisier you are, the more media coverage you will get)
- High radiation readings at prominent sites in town (get someone with a good EMF reader, or preferably a Building Biologist, to do the readings for the media).
- Participating in radio interviews with a simple repetitive message (e.g. But APRANSA, is it safe?... Ummm Well No!)
- WIFI in schools – if you can get permission to do readings in school grounds, and if you have parents willing to speak.
- Organise a Community Q & A and invite the media and Councillors.
- Speak at Council meetings and invite media, have your own cameramen attend also and put together short edits for social media.
- Invite to events the local TV crews, radio stations and local papers.

Most important:

- Write short sharp press releases.
- Have spokespeople quoted in the press releases and have them available for interview.

For additional media support email kimsponton@gmail.com

SOCIAL MEDIA

The core admin must make a commitment to support each other on social media. To put it bluntly it can be BRUTAL online, especially on Facebook community pages that have active trolls and the uninformed general public.

You need a strong back-bone through these experiences and need to stay open to sharing relevant educational material and requests for action; in spite of what insults are thrown at the team.

Always remain calm, polite, informative and if needed report rude comments to the Admin of the page and name the Troll for who they are.

Another important consideration is 'Shadow Banning' (please be mindful of the increasing censorship of 5G posts on Facebook and Instagram). You need to be creative in how you deliver key messages.

Always tag active members on posts you are calling for direct action on. Use Administrator features on Facebook such as 'Announcement' and 'Pin to top' to prioritise important updates and posts on the group page.

It is a good idea to set key questions on your Facebook page for requesting members. Always check their profiles for legitimacy. Set questions before allowing people to become group members. Request email address via member questions and store in another secure document, in case the page gets shut down.

LETTER TO COUNCIL – SHARING THE PRECEDENT

Dear Councillor,

As Council is aware, telecommunications corporations are currently rolling out 5G. Their 5G roll-out involves the deployment of tens of thousands of mobile phone base stations across Australia, including small cell installations every 200m to 300m, in close proximity to homes, schools and workplaces, on light poles, electricity poles and buildings.

There is growing public awareness that 5G is a health and environmental catastrophe in the making.

On the 19th March 2020, the Byron Shire Council unanimously voted to pass a resolution that Council does not currently support a proposed 5G upgrade to a tower in Mullumbimby and continues to support a moratorium on the installation of 5G technology infrastructure until previously requested information is provided, including:

- a) identification of and commitment by a State or Federal Government body to do a comprehensive review of the cumulative impacts of the 5G technology,
- b) identification of who holds responsibility for the on-going monitoring of any cumulative impacts,
- c) commitment from the State Government to review the current planning processes for the installation of small cells and consideration of any possible improvements.

The Byron Shire Councillors' concerns echoed that of the community: health implications, lack of evidence on cumulative effects of 5G exposure, privacy and data security concerns and 5G's massive carbon footprint. This Council Motion sets a precedent for other Australian Councils to follow suit.

Federal telecommunications laws have stripped Councils of almost all decision-making powers in respect of the deployment of 5G infrastructure and given the telcos unprecedented powers.

This has resulted in reckless deployments, without due regard for Australian standards or public health and safety. For example, there have been instances where telcos have deployed antennas on drinking water reservoirs without the agreement of the water utility, and failed to maintain their equipment, placing water quality and worker safety at risk.¹

The proliferation of small cells on road safety infrastructure poses a significant risk to safety. Small cell installations on street lighting, traffic lighting, signs and other road infrastructure can impact road safety and electrical safety for the public (in the event of vehicle impact) and maintenance staff. And yet, in Queensland (for example) telco land access notifications to Main Roads rarely include critical road safety and electrical engineering approval.²

Although individual 5G individual installations are defined as "low impact" a 5G network of many antennas (say on every other pole down a street) is not at all low impact in its effect and telcos ought to be required to obtain agreement with Councils and stakeholders. As the Australian Local Government Association (ALGA) stated in its submission to the current parliament inquiry into 5G:

"The Proliferation of 5G and other telecommunications infrastructure has also been an issue of concern to a number of councils. This proliferation includes attaching increasing numbers of telecommunications structures to local and state government and privately held infrastructure. "...the rollout...needs to be balanced Local government planning legislation and community consultation exist for a reason – to ensure that facilities and infrastructure meet certain standards and safety requirements."

"ALGA encourages the Commonwealth Government to lead the agenda on the 5G rollout, rather than leave the rollout to be driven by commercial interests. Commercial interest needs to be balanced with planning laws which are designed to protect public safety, limit the impacts on the environment and also to ensure the community has a say in the planning process."

The ARPANSA Standard is one of the least protective in the world. It is based on the ICNIRP Guidelines that were set by a private German organisation that has been shown to have numerous commercial conflicts of interest and is not subject to independent regulatory examination.

¹ Submission by Water Services Association of Australia, Inquiry into the deployment, adoption and application of 5G in Australia, Submission #297

² Submission by Queensland Government (Department of Transport and Main Roads), Inquiry into the deployment, adoption and application of 5G in Australia Submission #334

The limits in the ARPANSA Standard are not protective of vulnerable groups such as pregnant women, children and immune compromised people, who are more sensitive to the effects of RF EMR. Hundreds of independent experts on RF EMR effects attest that exposures below the limits in the ARPANSA Standard can be harmful to human health.

The deployment of 5G would result in an exponential increase in base stations and other RF EMR devices, dramatically increasing the public's cumulative RF EMR exposure. 5G uses millimetre waves and phased array antenna beamforming that have not been rigorously tested for safety. There is evidence millimetre waves have adverse effects on the skin and eyes, such as skin cancer and cataracts.

Martin Pall (Professor Emeritus of Biochemistry and Basic Medical Sciences, Washington State University) has warned that 5G poses a risk of a drastic rise in multiple diseases and ailments, a catastrophic irreversible decline in reproduction and possible epidemics of melanoma, blindness, renal failure, autoimmune disease, spontaneous abortion and autism as a consequence of 5G.

Internationally, thousands of scientists, medical doctors and health care providers have called for a moratorium on the roll-out of 5G until potential hazards for human health and the environment have been fully evaluated.

On the risks of 5G, Professor Lennart Hardell (a world renowned oncologist from the Karolinska Institute in Sweden and Professor at Örebro University Hospital in Sweden) recently stated, "... if no action is currently taken, the costs to society will most likely be very high in terms of premature deaths, deteriorated public health and damage to the ecological system."

Scientific studies have shown that RF EMR can cause immune dysfunction and short term-exposures to millimetre waves can have adverse physiological effects on the peripheral nervous system, the immune system and the cardiovascular system. To be unnecessarily increasing people's involuntary exposure to this radiation at a time when Australia faces a viral epidemic is irresponsible.

It should be for the community to decide what is an acceptable risk, not government agencies or corporations.

Regardless of the current limitations of their powers, Councils have a social responsibility to protect the public and the environment from exposure to harm. We call on you, our representatives, to advocate on our (and indeed your own) behalf to do everything you can to halt the disaster that 5G will be if allowed to roll out.

The deployment of 5G in the absence of adequate safety testing is a violation of the Precautionary Principle. We call on Council to invoke the Precautionary Principle and reject the ARPANSA Standard as "evidence" of 5G safety by:

- (i) formally opposing all 5G upgrades to existing towers
- (ii) formally opposing all small cell installations (as these are an integral part of the 5G roll-out and are intended to be upgraded to 5G)
- (iii) calling on the State and Federal governments to:
 - a. impose a moratorium on 5G deployment
 - b. undertake a comprehensive review of the cumulative impacts 5G technology
 - c. identify who holds responsibility for the ongoing monitoring of cumulative impacts of 5G technology
 - d. facilitate the deployment of safer wired telecommunications options for service provision, with wireless as an adjunct only where necessary
 - e. amend telecommunications legislation to empower local governments and communities to determine mobile phone base station deployments.

We trust you will hear our concerns and act.

Yours Sincerely,

STOP 5G NORTHERN RIVERS NSW - RALLY SPEECH

13 June 2019, Mullumbimby NSW (outside Byron Shire Council)

Hello everyone,

It's really humbling to have us all gathered here – and to realise we truly are all in this together. And to see such a show of people in this beautiful Northern Rivers community.

Based on the last 15 minutes, we know that we have a voice, and we're not afraid to use it because in this instance, silence is consent.

So Stop 5G Northern Rivers NSW started as a conversation between a friend and I. That was only 5 weeks ago.

Since then, our Facebook group has attracted 1700 members. We know that so many community members have been compelled to find out more about the 5G roll-out, which is already happening right as we speak in parts of Australia.

People who have never identified as activists... who have never used their voice for protest are being called to question and research and stand up on this issue. Thank you all for being here.

So, what exactly is 5G wireless technology?

5G is transmitted via powerful microwave and millimetre radiation frequencies that need infrastructure (such as towers, antennas, cell boxes, satellites) every 150 to 500 metres apart to ensure efficiency.

If the 5G installation goes ahead as planned, the environment, animals and people will be exposed to 50 to a hundred times stronger radiation than we currently experience on 3G and 4G networks – and existing wireless technologies.

Cities around the world – such as Brussels and Florence – have banned 5G due to health concerns and the lack of independent scientific studies to determine its effects.

According to the Environmental Health Trust, at least 21 cities in the US have passed ordinances restricting small cell installation and many are charging re-certification fees to make it unprofitable for the wireless industry.

Many other areas world wide are considering their positions as evidence mounts around the danger of this radiation.

In Australia, we're moving towards a 2020 nationwide roll out. And the technology has already been switched on across the coastal region of the Gold Coast and parts of Brisbane.

Telstra 5G modems have become available to the general public and the first 5G mobile device by Samsung is on the market. If the roll out is halted, it has been estimated that big telcos are set to lose an estimated \$6 trillion.

So today, I'm here for many reasons.

Firstly, I realised 20 years ago that I was sensitive to electromagnetic frequency (otherwise known as EMF). The idea of increased radiation exposure in the form of 5G technology is alarming.

I'm a mother of two young children. Children are scientifically proven to be the most susceptible to the harmful damage of electromagnetic radiation, along with the elderly, people who are sick, and the vulnerable.

As a registered primary school teacher, I believe it's unethical that Australian children are in learning environments with wireless technology set to up to 100 times higher than accepted and regulated levels in other countries.

As a sustainability professional and advocate for the environment, my concerns around 5G is that flora and fauna will be adversely impacted as a result of telcos and the Federal Government prioritising economic benefit.

The reality is that we're already exposed to high radiation levels through WI-FI and EMF pollutants. 5G, as the next generation of wireless technology, will only amplify this exposure.

Yes, we will get faster Internet. But if 5G successfully rolls out in this region, we will be assaulted by the unseen. I'm not talking hypotheticals now. The science is clearly in: EMR or Electromagnetic Radiation is harmful to humans, animals and the environment.

The Stop 5G Northern Rivers NSW group has a clear mission:

- We are committed to raising community awareness about the implications of 5G technologies and the impact it will have on the environment, humans and animals. We encourage everyone to do their own research – to come to their own informed and educated decisions about the scientifically proven implications of the increase in EMF pollutants from 5G technologies.
- We call for a moratorium on the 5G roll out in the Northern Rivers. We also call on Byron Shire Council to make a stand against any future roll out in this region and to take precautionary measures to safeguard the community. Let us set a precedent for action and awareness for the rest of Australia.
- We call for independent safety testing and new regulations to protect the health of our communities and environment.

When we look at 5G wireless technology, the issue is multi-faceted and complex. There's simply not enough time here to address all the issues. Personally, I've gone down the rabbit hole – and I know I'm not alone.

The purpose of this rally is to focus on 3 key issues: Safety, health and lack of public consultation.

Let's look at Safety first

So ARPANSA – the Australian Radiation Protection and Nuclear Safety Agency – is the organisation that advises the Federal Government on the current safe levels for radiation exposure. ARPANSA last did testing back in 2002 (17 years ago) even before 4G and certainly doesn't cover 5G technology.

ARPANSA has a disclaimer on its site that says that their information should only be used as a guide for education purposes and you should seek professional advice (ie. a doctor or scientist).

Its 'safe' level recommendation is significantly higher than some other countries. However, its testing standards are flawed.

For example, ARPANSA's safety guidelines use short, rather than long-term exposure standards. The current guidelines are based on the thermal effects of a 6-minute exposure only.

The implications of this are obvious. They fail to take into consideration scenarios such as kids being exposed to WI-FI in the classroom daily and in their homes, to workers being exposed to levels continuously through their work and the list goes on.

Our group's second key concern is around HEALTH

More than 100,000 signatories from at least 187 countries have signed the 5G Space Appeal petition opposing the roll out of 5G technology, as of this month. These include scientists, doctors, environmental organisations and citizens.

There is widespread concern and a whole body of peer-reviewed studies that show there is a real and imminent threat to the future of our children and environment.

According to global experts, here are some of the health effects of existing EMR:

1. Cancer, sterility and miscarriage.
2. EMR is also affecting learning and memory, brain function and general well-being. Symptoms can also manifest as headaches, nose bleeds and skin rashes.
3. EMR also alters DNA, which obviously leads to a whole host of problems. I encourage you to research this for yourself.

I think we can all agree that one of the most amazing things about living in this part of the world is our opportunity to connect with nature. There are local and international studies that clearly state that 3G, 4G and wireless technologies are harmful to flora and fauna.

It's predicted that populations of birds, bats, bees and other insects will drastically decline if the 5G roll out is successful.

A study at the Nightcap National Park here in the Northern Rivers found that after the installation of 3G and 4G towers in that area, there was a mass exodus of bird species...and insect species dropped dramatically.

Finally, in all of this we shouldn't lose sight of the fact that there has been NO PUBLIC CONSULTATION

5G will result in a massive increase in inescapable, involuntary exposure to wireless radiation. In other words, you can't opt out.

The roll out has begun without any community consultation, or peer-reviewed studies to ensure the safety of the environment, animals and humans.

As I mentioned earlier, the first step is educating Byron Shire Council on the alarming worldwide concerns of 5G technology. We're calling on the council, telcos and the Federal Government to exercise a duty of care and adhere to the international policy of the 'Precautionary Principle'.

This Principle states an action should not be taken when there is scientific uncertainty about its potential impact.

So where to from here?

A community hearing Q & A with a panel of expert speakers will be held at St John's Primary hall, here in Mullumbimby, on Saturday, 29th June, from 2 to 4 pm. So those details again, 29th of June from 2 to 4pm.

After the rally, please sign our petitions and donate what you can to help us continue our collective efforts and community awareness campaign.

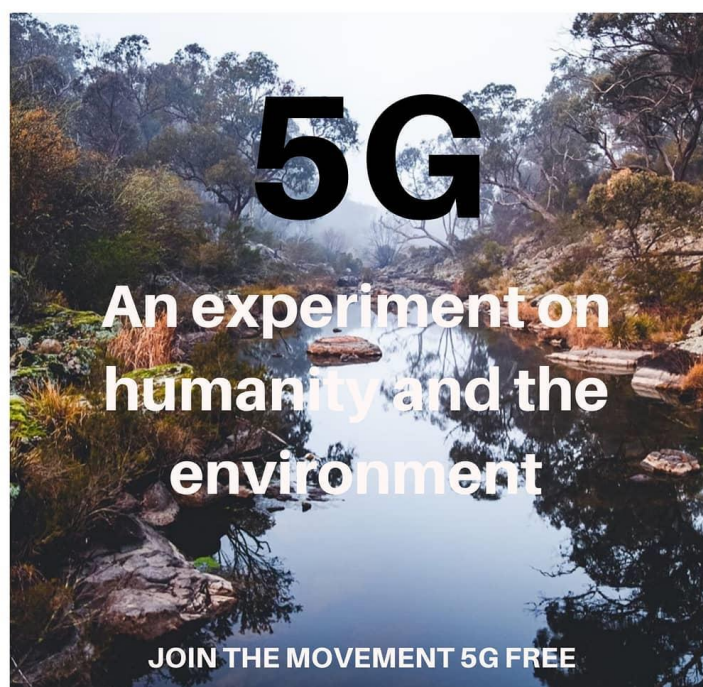
There's been a core team of volunteers essentially working around the clock. Up to this point, our focus has been on community awareness and education around 5G. What's needed now is to strategically move forward using legal pathways. We need administrators...we need experts... doctors, scientists, lawyers – and you – we need all of you – to help us in our next phase.

As we can see today, we are not alone.

In this time of critical change, it's essential to unite. To step up and take action. We're on the cusp of something big, like we've never experienced before. The impact of the 5G roll out is unprecedented.

This time next year, will the Northern Rivers be 5G free? The future is in our hands NOW! It's up to us!

Thank you.



FIRST PRESENTATION TO BYRON SHIRE COUNCIL

BY STOP 5G NORTHERN RIVERS NSW (27 JUNE 2019)

Due to time constraints, we'll assume that councillors have knowledge of 5G. For those of you who don't, we've included a list of resources which we'll give to you later.

Representing 2000 members across the Northern Rivers, I'm here to address a few key points:

- Hundreds of concerned residents attended the recent protest rally because they do NOT want 5G in the Shire. Our streets would be filled with thousands of tiny antennas pumping out inescapable wireless radiation 24/7.
- According to the 5G Space Appeal, "the deployment of 5G constitutes an experiment on humanity and the environment that is defined as a crime under international law". Over 100,000 signatories from at least 187 countries have signed, including scientists, doctors, environmental organisations.

Over the last 2-3 months:

- Brussels and Florence have refused permissions for 5G.
- Glastonbury council has for now opposed the 5G roll out.
- At least 21 US cities have passed ordinances restricting "small cell" installation, and many are charging "recertification fees" to make it unprofitable for the wireless industry. There are many more examples of cities putting the brakes on 5G.

The fact is Byron Shire Council is already aware of the harmful effects of microwave radiation after rejecting the Wilson's Creek 4G tower. Any decision council now makes to approve 5G towers or 5G small cell technologies will be made with prior knowledge of harm.

Byron Shire Council has a duty of care to invoke the Precautionary Principle and protect our community by halting the roll out of 5G unless it can be verified through rigorous, independent testing that this technology will have NO adverse impacts on public health and safety, wildlife and the environment.

What do we expect from council?

1. We call on council to refuse all planning applications for new towers and upgrades to existing towers and 'small cell installations' unless proven safe. We cannot rely on the integrity of ARPANSA's safety standards.
2. We call on council to investigate and use its powers under the Local Government Act, the Environmental Planning and Assessment Act, and the Mobile Phone Base Station Deployment Code, along with any other council legislation, to halt the 5G roll out.
3. Council has already committed the Shire to the Smart Cities and Suburbs Program, an initiative that's reliant on 5G. We call on council to immediately stop spending funds on Smart Cities and the surveillance technology that it is installing.
4. We request council undertake public consultation until the community is confident that 5G technology is safe.
5. We also request the council facilitate its proposed public information event (outlined in the mayoral motion to council – motion 3) before mid-August 2019.

Science shows that wireless radiation has detrimental health effects. There are no 5G studies to show it's safe. In summary, we cannot accept 5G unless it is proven safe.

Millions from all over the world flock to beautiful Byron to "chill out and slow down". 5G will heat us up and speed us up. It will manipulate the atmosphere and destroy the essence of what makes Byron unique.

5G and Smart technology not only affects the people opposing it, it will affect all of all of us.

Thank you.

SECOND PRESENTATION TO BYRON SHIRE COUNCIL

BY STOP 5G NORTHERN RIVERS NSW (19 March 2020)

Good Morning, I am here today to submit hundreds of petitions on behalf of the community in opposition to the proposed Telstra 5G tower upgrade at 95 Dalley Street in Mullumbimby.

The 260 petitions I have here today were mostly gathered over the past 2 weeks, and were collected predominantly in the vicinity of the tower and at the local farmers market in Mullumbimby. The majority of petitions were signed by residents of the Northern Rivers region. Included are 150 members of the Mullumbimby community (that reside within a 10km radius), 48 residents within a 400m distance of the tower, also local business owners and employees.

Given the short consultation period offered by Telstra, we were not able to distribute the petition throughout the entire community. However, of the community members who were given access to the petition, 99% signed it! We believe that this sample reflects the position of the community as a whole. Over the past year continued opposition to 5G has grown in the Byron Shire.

Furthermore, a recent survey was conducted of businesses within a 300m distance from the tower. These local businesses were asked if they wanted a 5G network in the CBD area of Mullumbimby. Of the businesses surveyed 100% of them opposed the 5G upgrade and signed petitions.

What these businesses do want though, is to keep their landline and fixed wired internet which is more reliable, secure and resilient to storms, floods and fires. Wired networks will meet the service needs of the community without producing emissions that pose a serious threat to human health and that of the natural ecosystems we depend upon.

The solution to this conflict with telco industries is to ask that Telstra focus on the delivery of wired infrastructure to homes and businesses in Mullumbimby, with wireless services as an option ONLY where absolutely necessary.

Key concerns of the community can be summarised as:

1. 5G uses millimetre waves and phased array antenna beamforming that have not been rigorously tested for safety. Evidence has shown adverse effects on the skin and eyes, such as skin cancer and cataracts.
2. The Australian federal agency ARPANSA has one of the least protective standards for microwave radiation exposure in the world. The leading scientist for ARPANSA even admitted to a Byron Bay resident on live ABC radio that he could not guarantee safety after the 5G roll-out.
3. Hundreds of independent experts on radiofrequency electromagnetic radiation (RF EMR), attest that exposures below the limits in the ARPANSA Standard can be harmful to human health.
4. The deployment of 5G would result in an exponential increase in base stations and other wireless devices, dramatically increasing the public's cumulative radiation exposure.
5. Cumulative exposures from all sources of RF EMR are not monitored or regulated by industry or government.
6. Scientific studies have shown that RF EMR can cause immune dysfunction, therefore Telstra's proposed upgrades would be causing further biological oxidative stress on humans by an involuntary exposure to radiation which is both reckless and irresponsible at this time.
7. The significant amounts of energy that 5G technology will consume threatens the achievement of national and global climate goals.
8. The residents of Mullumbimby do not consent to an increase of microwave radiation pollution that 5G would bring.

Regardless of the current limitations of your powers, Councils have a social responsibility to protect the public and the environment from exposure to harm. We call on you, our representatives, to advocate on our (and indeed your own) behalf to do everything you can to halt the disaster that 5G will be if allowed to roll out.

The deployment of 5G in the absence of adequate safety testing is a violation of the Precautionary Principle. We call on Council to invoke the Precautionary Principle and reject the ARPANSA Standard as "evidence" of 5G safety and formally oppose the upgrade to the Mullumbimby tower.

It should be for the community to decide what is an acceptable risk, not government agencies or corporations.

I implore you to vote with utmost urgency an immediate moratorium of the 5G roll-out in the Byron Shire.

Please let the Mullumbimby Community be heard.
Thank you.

THE COMMUNITY WANT **Insert City/Town/Shire or Region TO STAY FREE FROM 5G**



PETITION LETTER AGAINST PROPOSED 5G UPGRADE TO: TOWER AT **Insert Address (RFNSA #**Insert Number**)**

I object to all 5G upgrades in the **Insert Location – e.g. city, town or local Shire** and call for a moratorium on the roll out of 5G across the entire **Insert name** region. Furthermore, I object to the proposed **insert name of telco** 5G upgrade to the tower located at **Insert Address** for the following reasons:

1. The 5G roll out is a breach of the mandatory obligation to apply the precautionary principle when deploying mobile phone radiocommunications infrastructure (Clause 4 *Mobile Phone Base Station Deployment Code*).
2. There are thousands of peer-reviewed scientific studies evidencing harm from radiofrequency electromagnetic radiation (RF EMR) well below the standards set by ARPANSA.
3. The ARPANSA Standard has been strongly criticised by independent scientists worldwide as unscientific and inadequate for the protection of human safety. Authorities in other countries have adopted standards ten to 100 times more rigorous than the ARPANSA Standard.
4. More than 250 scientists have signed the International EMF Scientist Appeal, which calls for stronger exposure limits. These scientists have published more than 2000 peer-reviewed papers on EMF in professional journals and arguably constitute the majority of experts on the effects of non-ionizing radiation.
5. No long-term prospective studies have been completed proving the safety of RF EMR levels under the ARPANSA Standard for children.
6. In 2011, the International Agency on Research on Cancer (IARC) listed non-ionising radiofrequency radiation from cell phones and other wireless devices in Group 2B: Possibly carcinogenic to humans.
7. A number of leading scientists have since argued that the evidence that wireless is carcinogenic has increased and IARC should upgrade the listing to Group 2A: probably carcinogenic to humans or Group 1: carcinogenic to humans classification.
8. The views of ICNIRP (on whose guidelines the ARPANSA safety limit is based) and ARPANSA are not in line with the opinions of the larger, independent scientific community that has published peer-reviewed research on the biological effects of RF EMR. ICNIRP is not independent of industry and has had numerous conflicts of interest identified over the years.
9. 5G would massively increase our exposure to RF EMR with a new array of densely populated “small” cell transmitters making this hazardous exposure inescapable 24/7.
10. There are no independent long-term studies demonstrating the safety of prolonged exposure to the millimetre frequencies (from 26 GHz up to 86+ GHz) intended to be used for 5G in the future.
11. Scientific literature on the health risks of 5G frequencies identifies detrimental skin and ocular effects and profound effects on all biological systems including cells, bacteria, yeast, animals and humans, including heart rate variability, teratogenicity, bacterial growth alterations with antibiotic resistance.
12. Internationally, hundreds of scientists and medical doctors have called for a moratorium on the roll-out of 5G until potential hazards for human health and the environment have been fully evaluated (e.g. International EMF Scientist Appeal and the 5G Appeal). Such moratoria have been implemented overseas (e.g. in Brussels, Geneva and Glastonbury).

13. ARPANSA has acknowledged that further research on the frequencies to be used with 5G is needed:
Both the RSC (2014) and SCENIHR (2015) reviews identified that the dosimetry in the 6 GHz to 300 GHz range is still developing and further research is required to examine the effects of exposure to new and emerging technologies. The SCENIHR review in particular mentioned that “considering the expected increase in use of THz technologies, more research focusing on the effects on skin (long-term, low-level exposure) and cornea (high intensity, short-term exposure) is recommended.
14. 5G millimetre waves involve vastly more pulsation than the 3G and 4G microwaves. There is substantial scientific evidence that pulsed EMFs are usually much more biologically active than non-pulsed (or continuous wave) EMFs.
15. Upgrading the base station to 5G would add a layer of radiation exposure, on top of the already existing 3G and 4G infrastructure. EME levels would continue to rise cumulatively as further carriers upgrade to 5G by installing more antennas. They would rise even further in the second phase of 5G with the use of mmWaves requiring the dense deployment of small cells.
16. Multiple peer-reviewed studies have shown an increase in ill health effects in populations living near mobile phone base stations, ranging from neurological damage to breast and brain cancers.
17. A recent analysis by Vertiv found that the move to 5G would likely increase total network energy consumption by 150 to 170 per cent by 2026, with extreme impacts for global warming.
18. Professor Martin Pall (Emeritus of Biochemistry and Basic Medical Sciences, Washington State University) has warned that EMF exposures make plants much more flammable, and may therefore cause and contribute to bushfires. With Australia facing record bush fire threat levels, there is an urgent need for more research into the bushfire risk 5G poses to rural (and even urban) Australia.
19. Many scientists have warned that flora and fauna – trees, birds, wildlife and insects are all under threat of harm (or worse) from microwave radiation from 5G. Widespread harm to flora and fauna (especially bees) would have dire repercussions for us all.
20. There are growing privacy and security concerns about the Internet of Things, with increasing invasions of smart home devices by hackers.
21. Mobile phone towers, in general, cause a significant loss of scenic amenity to residents.
22. Based upon historical trends, mobile phone towers adversely affect the value and saleability of nearby properties.
23. Wired communications are more resilient to storm, flood, fire and more energy efficient than wireless networks.
24. Cumulative, simultaneous exposure of people to RF EMR from all sources (i.e. towers, small cells, WiFi, Smart City infrastructure, smart street lighting and IoT devices) is not regulated.

Comments:

Name: _____

Address: _____

Date: _____ Signed: _____

Email: _____

Mullumbimby Business Survey

Proposed 5G upgrade to tower at 95 Dalley Street, Mullumbimby

Business Name: _____

- | | | |
|---|-----|----|
| 1. Are you the Business Owner? | YES | NO |
| 2. Are you an Employee? | YES | NO |
| 3. Does your business rely on wired internet such as ADSL or NBN? | YES | NO |
| 4. Do you want 5G in the Mullumbimby CBD? | YES | NO |
| 5. Would you like to sign the petition opposing 5G? | YES | NO |

Any additional comments:

Name (optional): _____

Business Address: _____

Business Email: _____

Date: _____

IMPORTANT: Calculate the percentage of businesses surveyed that **DO NOT WANT 5G**. You can use this statistic to lobby Council, local Chamber of Commerce, MPs, objections to telcos etc.

17 March 2020

Dear Telstra

Submission: Proposed 5G upgrade to tower at 95 Dalley Street, Mullumbimby 2482

For the reasons outlined below, we object to the above mentioned proposed upgrade.

1. Petitions

We have sent (to Wireless Consultant/Telstra) petitions signed by 268 residents of the Northern Rivers region or visitors. Included are 155 members of the Mullumbimby community (within a 10k radius), including 48 residents within a 400m radius of the tower and local business owners and employees. An online petition³ advocating for a “Byron Shire to Stay Free From 5G” is circulating and gathering more support every day. As of 17 March 2020, there are 1,341 signatories. These petitions are a snapshot of the community’s views. We are a volunteer group with limited resources and time, doing our best to give the community a voice on this issue. It is Telstra’s responsibility to capture market research, instead of pushing unwanted technology on whole communities.

As the public notification process for this upgrade consisted of a single classified notice in the Byron News (not the local Mullumbimby paper, which is the Echo) we believe a large part of the Mullumbimby community is unaware of the proposed upgrade. If all interested and affected parties had actually been notified, you would have received many more objections to the proposed upgrade. Given the short consultation period we were not able to distribute the petition throughout the entire community. However, of the community members who were given access to the petition, 99% signed it! We believe that this sample reflects the position of the community as a whole.

A recent survey was conducted of businesses within a 300m radius from the 95 Dalley St tower. These local businesses were asked if they wanted a 5G network in the CBD area of Mullumbimby. Of the businesses surveyed 100% of them opposed the 5G upgrade and signed petitions.

2. Location Sensitive

Proposed site upgrade distance from sensitive and essential service locations in the community: Meadows Medical Clinic 90m, Police Station 150m, Fire and Rescue station 170m, Mullumbimby Comprehensive Health Clinic 220m, Mullumbimby Neighbourhood Community Centre 260m, Council Chambers 300m, Cobbers Childcare Centre 330m.

It is important to consider the Fire and Rescue station that is only 170m away from the site; it has been well documented that increasing exposure to mobile phone towers can have adverse biological effects on humans, and these risks can have far greater impacts to the community when it affects our protectors.

“Firefighters are the protectors of people and property and should be protected under the Precautionary Principle of Science and therefore, unless radiation is proven safe and harmless, cellular antennas should not be placed on or near fire stations.”⁴

Scientific studies have shown that radio frequency electromagnetic radiation (RF EMR) can cause immune dysfunction and short term-exposures to millimetre waves can have adverse physiological effects on the peripheral nervous system, the immune system and the cardiovascular system. With vulnerable members of the community needing access to medical centres, it would be dangerous and irresponsible of Telstra to intentionally increase the public’s exposure to RF EMR in such close proximity to these essential services. Causing further biological oxidative stress on humans by an involuntary exposure to radiation is both reckless and unnecessary.⁵

³ <https://www.change.org/ByronShireStay5GFREE>

⁴ <https://mdsafetech.org/2019/09/28/firefighters-fighting-fires-and-now-cell-towers/?fbclid=IwAR275zp9wkLcjOZQ6rEHL2BfMPeteQltEtPEgHJGn1-tNu9KvsappgIHOPU>

⁵ <https://bioinitiative.org/research-summaries/>

3. Byron Shire Mayoral Minute

On the 13th of June 2019, over 300 local residents participated in a rally outside the Byron Shire Council (BSC) calling for a moratorium on the 5G roll out.⁶ The Byron Shire Mayor, Simon Richardson, responded to the community concerns by addressing the BSC (located in Mullumbimby) with a Mayoral Minute.⁷ Mayor Richardson proposed to, *"Include within its list of invited speakers, representatives from Telstra, ARPANSA, the Member for Richmond, Justine Elliot MP, any pertinent accredited experts in this field and representatives from the Stop 5G Northern Rivers group."* We were informed by the Mayor, that Telstra and ARPANSA declined Council's initial invitation to engage in a community information session. The community have been waiting for over 6 months to participate with an informed panel regarding the 5G roll out.

Ten months later it is safe to say that the community awareness and objection to 5G has grown exponentially in Mullumbimby. There are available alternatives to 5G that will adequately meet the telecommunications service needs of the community without producing emissions that pose a serious threat to human health and that of the natural ecosystems we depend upon. Mullumbimby is a community that strongly advocates to remain *Free From 5G*. We ask that Telstra focus on the delivery of wired infrastructure to homes and businesses, with wireless services as an adjunct ONLY where necessary.

4. De-tox Tourism and White Zones

The Byron Shire is a leading national tourist destination for Australians and International visitors alike. Tourists flock to this area to "chill out and slow down"; but with 5G people would literally heat up (the skin) and speed up (online connectivity). Mullumbimby sits in the heart of the Northern Rivers region and health, natural beauty, environmental protection and community connection are upheld as key values.

Many of the visitors to this region come from the city and welcome a de-tox from the highly addictive technologies (such as smart phones and lap-tops), whilst they engage with the natural environment and many experiences on offer (yoga, meditation, retreat, permaculture, hobby farming etc). Communities close to Mullumbimby that fall within mobile phone 'black spots' are becoming more prized and needed as valuable White Zones (environment's free from harmful microwave radiation rays and WiFi free). White Zones (otherwise known as Black Spots) can be preserved as sanctuaries for life, and as such can enjoy economic benefits. EMR is a pollutant and likely carcinogen. Several White Zone areas can be found in the surrounds of Mullumbimby and if 5G is implemented in to the centre of this thriving small town, it will be a major deterrent not just to residents but also to health-conscious visitors and electro hypersensitive individuals. This will be to the detriment of the local economy. The Wilson's Creek community (only 10km from Mullumbimby and in a White Zone) successfully halted a proposed 4G Telstra tower in 2018 and has comprehensively documented and proven the strong community objection to new mobile phone towers and 5G upgrades in the Mullumbimby township and surrounds. Many public meetings have been held in Mullumbimby as far back as the 4th of August 2018.⁸ Please note, all of these Wilson's Creek residents rely on Mullumbimby for essential services and access to basic goods; 5G will be a major deterrent and potential health risk to these community members.

5. There are no proven 5G use cases that would benefit the community

The ITC industry claims that 5G will bring all kinds of benefits to the community. However, on close examination, this is mostly speculation, and 5G offers little beyond what wired, 4G and WiFi services can provide.

For example, remote surgery using 5G, whilst technologically possible, is completely impractical. Frost & Sullivan analyst Michael Jude has pointed out that health care organisations would be "crazy" to try remote surgery over a wireless network. Connection reliability would require antennas to be built on "practically everything", and even then "it would be really hard to do with any kind of acceptable reality"⁹.

Although the telecommunications industry has been vigorously promoting the application of 5G in the deployment of connected and automated vehicles, 5G is not actually needed for driverless vehicles and automotive makers are not basing their plans for vehicle autonomy on the availability of 5G coverage.¹⁰

Moreover, for an autonomous vehicle road network that relies on 5G, there could not be any trees over 4 metres high by the roadside as these would interfere with wireless signals necessary to run the network.¹¹ Then, in order for autonomous cars to

⁶ <https://www.nbnnews.com.au/2019/06/13/concerns-raised-over-5g-rollout-in-byron-shire/>

⁷ https://byron.infocouncil.biz/Open/2019/06/OC_27062019_MIN_997.HTM#PDF2_ReportName_6517

⁸ <https://www.echo.net.au/2018/07/wilsons-creek-residents-take-class-action-telstra-tower/>

⁹ <https://searchhealthit.techtarget.com/feature/Promises-for-5G-in-healthcare-are-great-but-its-still-early-days>

¹⁰ <https://www.edn.com/electronics-blogs/5g-waves/4461460/5G-and-autonomous-vehicles-might-not-go-hand-in-hand#comments>

¹¹ Public meeting, *Connected Hobart Public Forum: Help build Hobart's Future*, Presentation by Will Oakley (RACT)-autonomous vehicles, 26

use 5G, a very large part of road infrastructure would need to be covered by 5G. A 5G antenna would be required every 200 metres along Australian roads (and every 50 to 100m in urban areas), introducing a whole new level of road safety risks.

It is a serious concern that the telecommunications industry claims of “smart” roads and 5G cars improving road safety are unfounded. The opposite may well prove to be the case. For example, in Britain, since the introduction of “smart motorways,” the number of fatal accidents, and the number of near misses has risen significantly.¹²

Other hypothetical 5G use cases (such as automation in transport, manufacturing, retail and customer service) if they were to materialise could cause widespread job losses. Despite this risk, neither government nor industry has conducted a cost-benefit analysis of the impact this would have on the local economy and community.

6. Increased RF EMR emissions and the use of millimetre waves would put flora and fauna at risk

A large number of studies have shown that electromagnetic radiation poses a risk to bird and insect navigation systems (reducing their resistance to disease) and plant health.¹³ Studies have also shown that insects are especially susceptible to millimetre wave frequencies and eminent scientists have predicted 5G will exacerbate Bee Colony Collapse Disorder.

It has been demonstrated that the radiation levels emitted by 5G networks will heat bodies of insects to the levels that will affect their normal physiology.¹⁴ Insects are not only important pollinators, they are the base of the food chain for birds, amphibians, reptiles and mammals.

We bring Telstra’s attention to a report¹⁵ prepared by Australian botanist Mark Broomhall to UNESCO that details the association between increasing amounts of electromagnetic radiation and species disappearance and exodus from the Mt. Nardi area of the Nightcap National Park World Heritage Area over a 15-year period. The report contains a timeline of the activation of new antennas and documents the birds, bats and flying insects that have decreased in the area.

We believe that the roll-out of 5G in Mullumbimby and the Northern Rivers would jeopardise the survival of threatened and endangered species in the area (including native bees and a healthy honey bee population). A decline of bees in the local area could also have a damaging impact on the agricultural sector in the Northern Rivers region and negatively impact the local honey industry. The weekly Mullumbimby Farmers Market is a vital part of the community’s fabric, where local farmers make their livelihood and the community directly support their businesses. A decline in bees would have devastating impact on the whole community. The Stop 5G Northern Rivers NSW group have set-up stalls at the local Farmer’s Market and have been overwhelmed by the community rejection of any 5G upgrades or additional 5G infrastructure in Mullumbimby and the Northern Rivers region.

7. The proposed upgrade is part of Telstra’s 5G roll out, which contravenes the requirement in the *Mobile Base Station Deployment Code* (“the Code”) that it take a precautionary approach to deployment.

The limits in the Radiation Protection Standard (RPS3) are not precautionary as:

- (i) ARPANSA does not apply the precautionary principle when setting the limits.
- (ii) The limits are designed to protect against short-term, thermal levels of RF EMR exposure only, and do not protect against non-thermal effects of low-level exposure.
- (iii) When setting the limits in the Radiation Protection Standard (RPS3), ARPANSA disregards thousands of peer-reviewed scientific studies showing adverse biological effects on humans at non-thermal levels, below the limits in the ARPANSA Standard.
- (iv) Hundreds of independent experts on RF EMR effects attest that exposures below the limits in RPS3 can be harmful to human health. For example, more than 250 scientists from 43 countries have signed the International EMF Scientist Appeal, which calls for stronger exposure limits.¹⁶

¹² <https://www.thisismoney.co.uk/money/cars/article-7507769/Deaths-UK-motorways-8-Highways-England-says-smart-routes-safe.html> ; <https://www.bbc.com/news/uk-51236375>

¹³ <https://ehtrust.org/science/bees-butterflies-wildlife-research-electromagnetic-fields-environment/> ; Singer, K., *An Electronic Silent Spring: Facing the Dangers and Creating Safe Limits* (Portal Books, 2014); <https://mdsafetech.org/environmental-and-wildlife-effects/>

¹⁴ Thielens, A. et al, Exposure of Insects to Radio-Frequency Electromagnetic Fields from 2 to 120 GHz, *Scientific Reports* volume 8, Article number: 3924 (2018) <https://www.nature.com/articles/s41598-018-22271-3>

¹⁵ <https://ehtrust.org/wp-content/uploads/Mt-Nardi-Wildlife-Report-to-UNESCO-FINAL.pdf>

¹⁶ International EMF Scientist Appeal <https://emfscientist.org/>

- (v) The limits in RPS3 are not protective of vulnerable groups such as pregnant women and children who are more sensitive to the effects of RF EMR. Despite the recommendation of ICNIRP that separate guidelines be developed (or the ICNIRP guidelines be adjusted) for these sensitive groups¹⁷, ARPANSA adopted the guidelines without doing so.
- (vi) Although the limits in RPS3 include a “safety margin,” this is only designed to protect against thermal effects and is not at all precautionary.

As the limits in RPS3 are not based on the precautionary principle, Telstra’s adherence to those limits does not amount to compliance with the Code requirement that Telstra take a precautionary approach to deployment.

5G poses a potentially catastrophic and irreversible risk of harm to human health as:

- (i) The deployment of 5G will result in an exponential increase in base stations and other RF EMR devices, dramatically increasing the public’s cumulative RF EMR exposure.
- (ii) Internationally, thousands of scientists, medical doctors and health care providers have called for a moratorium on the roll-out of 5G until potential hazards for human health and the environment have been fully evaluated.¹⁸
- (vii) In 2017, the 250+ experts in the International EMF Scientist Appeal issued a statement recommending that 5G technologies must be subjected to an independent health and safety assessment before they are launched.
- (viii) From 2021, 5G will use millimetre waves and phased array antenna beamforming that have not been rigorously tested for safety.
- (ix) 5G has unpredictable propagation patterns that could result in unacceptable levels of human exposure to electromagnetic radiation.¹⁹
- (x) 5G millimetre waves involve vastly more pulsation than the 3G and 4G microwaves and there is substantial scientific evidence that pulsed EMFs are usually much more biologically active than are non-pulsed (or continuous wave) EMFs.²⁰
- (xi) The very limited existing scientific research on the health risks of 5G frequencies identifies potential detrimental skin and ocular effects and profound effects on all biological systems including cells, bacteria, yeast, animals and humans, including heart rate variability, teratogenicity, bacterial growth alterations with antibiotic resistance.²¹
- (xii) There is evidence millimetre waves will have adverse effects on the skin and eyes, such as skin cancer and cataracts.
- (xiii) Preliminary evidence shows that exposure to frequencies over 30GHz could alter gene expression, increase the temperature of the skin, stimulate cell proliferation, alter the functions of cell membrane and neuro-muscular systems, and are able to modulate the synthesis of proteins involved in inflammatory and immunologic process, with possible systemic effects.²²
- (xiv) There is evidence that biological responses to millimetre-wave irradiation can be initiated within the skin, and the subsequent systemic signalling in the skin can result in physiological effects on the nervous system, heart and immune system.²³
- (xv) Telecommunications industry assurances that 5G will maintain “low levels” of RF EMR exposure are meaningless as the assumption that low level exposure will never cause health effects is scientifically unsupported.²⁴
- (xvi) Prof. Martin Pall identifies evidence of the cumulative nature and eventual irreversibility of neurological/neuropsychiatric, reproductive, mutational DNA, cardiac effects and some hormonal effects, which he describes as potentially existential threats. He warns that 5G poses a risk of a drastic rise in multiple diseases and ailments, a catastrophic irreversible decline in reproduction and possible epidemics of melanoma, blindness, renal failure, autoimmune disease, spontaneous abortion and autism as a consequence of 5G.²⁵
- (xvii) No research has been undertaken on the mix of frequencies humans would be exposed to with 5G.

¹⁷ ICNIRP Statement: General approach to protection against nonionizing radiation, Health Physics. 82, 540-548 (2002)

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

¹⁸ <https://ehtrust.org/small-cells-mini-cell-towers-health-letters-scientists-health-risk-5g/>

¹⁹ An ‘In-Depth Analysis’ on 5G deployment by the EU, requested by the European Parliament’s Committee on Industry, Research and Energy (State of Play in Europe, USA and Asia

²⁰ <https://peaceinspace.blogs.com/files/5g-emf-hazards--dr-martin-l.-pall--eu-emf2018-6-11us3.pdf>

<https://www.emfsa.co.za/videos/dr-martin-pall-to-the-nih-the-5g-rollout-is-absolutely-insane/>

²¹ Cindy L. Russell (2018) *5G wireless telecommunications expansion: Public health and environmental implications*,

<https://www.sciencedirect.com/science/article/pii/S0013935118300161?via%3Dihub>

²² International Society of Doctors for Environment, (2018) 5G networks in European Countries: appeal for a standstill in the respect of the precautionary principle http://www.isde.org/5G_appeal.pdf

²³ Kostoff, R.N. et al, *Adverse Effects of 5G Mobile Networking Technology under Real-Life Conditions*, 23 January 2020,

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

²⁴ Leszczynski, D. speaking at The 5th Asian and Oceanic IRPA Regional Congress on Radiation Protection (AOCRP-5) in Melbourne, Australia, May 20 – 23, 2018

²⁵ <https://peaceinspace.blogs.com/files/5g-emf-hazards--dr-martin-l.-pall--eu-emf2018-6-11us3.pdf>

- (xviii) People's cumulative, simultaneous exposures from all RF EMR sources (such as towers, small cells, WiFi, smart city infrastructure, smart street lighting, smart metres, mobile phones and other wireless smart devices) are currently unregulated and unmonitored.
- (xix) In some areas, the larger 5G exclusion zones (where RF EMR is greater than 100% of the public exposure limit) could extend into neighbouring properties where people live and work. We are opposed to the raising of the (already too high) limits in RPS3 to accommodate 5G.

No reasonable person could conclude that deployment of 5G in the absence of adequate safety testing is a precautionary approach.

8. The opinions of ICNIRP, ARPANSA, the WHO and the CMO out of line with the majority of experts

We do not consider it reasonable to rely on the opinions of ICNIRP, ARPANSA, the WHO and Chief Medical Officer, Brendan Murphy, as they form the minority opinion. Independent experts have pointed out that ICNIRP's denial of the existence of adverse effects of RF EMR below the ICNIRP Guidelines is not supported by the scientific evidence as ICNIRP ignores significant peer-reviewed studies that have found health effects below the Guidelines.²⁶ The same criticisms have been made of the ARPANSA Standard.²⁷

Furthermore, although ICNIRP holds itself out to be independent from commercial, national and vested interests, it is alleged to have conflicts of interest such as industry ties and industry funding²⁸ and has been described as "a public relations organization of the mobile communications industry".²⁹

As part of a project called "The 5G Mass Experiment," Investigate Europe (a team of investigative journalists from the European Union) allege the existence of an "ICNIRP cartel", a group of scientists who have either helped create, or defend the ICNIRP Guidelines. The journalists argue that the cartel preserves the current ICNIRP Guidelines for industry by conducting biased reviews of the scientific literature that minimize the health risks of RF EMR exposure.³⁰

9. 5G would consume significant amounts of energy and threaten the achievement of national and global climate goals.

The wireless approach presents a far bigger carbon footprint than wired communications. As the amount of required base stations, smart infrastructure and wireless devices exponentially increases, so too does total network energy consumption.

²⁶ Starkey, S. J., Inaccurate official assessment of radiofrequency safety by the Advisory Group on Non-ionising Radiation DOI 10.1515/reveh-2016-0060 Received September 30, 2016; accepted October 16, 2016 <https://www.degruyter.com/downloadpdf/j/reveh.2016.31.issue-4/reveh-2016-0060/reveh-2016-0060.pdf> ; ORSAA Submission to ICNIRP <https://www.emfsa.co.za/wp-content/uploads/2018/11/ORSAA-Submission-to-ICNIRP.pdf>

²⁷

https://www.researchgate.net/publication/325169912_Radio_Frequency_Exposure_Risk_Assessment_and_Communication_Critique_of_A_RPANSATR-164_Report_Do_we_have_a_problem ; <https://stopsmartmetersau.files.wordpress.com/2019/03/prof-pall-response-to-arpansa-letter-4-march-2019.pdf>

²⁸ Hardell, L., (2017) *World Health Organisation, Radiofrequency radiation and health – a hard nut to crack* <https://www.spandidos-publications.com/10.3892/ijo.2017.4046> ;

<https://microwavenews.com/CT.html> ;

<https://microwavenews.com/news-center/iarc-drops-anders-ahlbom-rf%E2%80%9393cancer-panel> ;

Pockett, S., (2019) *Conflicts of Interest and Misleading Statements in Official Reports about the Health Consequences of Radiofrequency Radiation and Some New Measurements of Exposure Levels* <https://www.5gexposed.com/wp-content/uploads/2019/07/magnetochemistry-05-00031-3.pdf> ;

Critic of ICNIRP (International Commission of Non-Ionizing Radiation Protection) & WHO International EMF Project

<http://www.chronicexposure.org/limitsICNIRP.html> ;

Leszczynski, D., *Is ICNIRP reliable enough to dictate meaning of science to the governmental risk regulators?*

<https://betweenrockandhardplace.wordpress.com/2016/04/08/is-icnirp-reliable-enough-to-dictate-meaning-of-science-to-the-governmental-risk-regulators/> ;

Leszczynski, D., *Brief Opinion on 5G and Health* <https://betweenrockandhardplace.wordpress.com/2019/05/31/leszczynski-brief-opinion-on-5g-and-health/> ; Maisch, D., *Conflict of Interest & Bias in Health Advisory Committees: A case study of the WHO's Electromagnetic Field (EMF) Task Group*, J. Aust. Coll. Nutr. & Env. Med. Vol. 25 (April 2006) pages 15-17

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.540.6714&rep=rep1&type=pdf>

²⁹ Adlkofer, F., (2018) *How the Mobile Communication Industry Deals with Science as Illustrated by ICNIRP versus NTP*, Pandora Foundation for independent research https://stiftung-pandora.eu/wp-content/uploads/2018/11/Pandora_Adlkofer_Dealing-with-NTP-Nancy-Draft_181026_en.pdf

³⁰ Moskowitz, J. M., (2019) *The ICNIRP Cartel and the Mass 5G Experiment, Electromagnetic Radiation Safety* <http://www.cqlpe.ca/pdf/5G-mass-experiment-ICNIRP-cartel-Investigate-Europe.pdf>

A recently updated, peer-reviewed study from 2016 found that without dramatic increases in efficiency, the Information and Communications Technology (ICT) industry could use 20% of all electricity and emit up to 5.5% of the world's carbon emissions by 2025, an increase directly linked to the 5G-driven Internet of Things³¹.

A recent study³² conducted by Vertiv and 451 Research found that 5G is going to be significantly more energy-intensive than previous generations of wireless connectivity and more than 90 per cent of telecommunications operators fear the roll-out of 5G technologies will result in significantly higher energy costs. Vertiv's own internal analysis discovered that the move to 5G is likely to increase total network energy consumption by 150 to 170 percent by 2026.

An analysis³³ of the ICT industry's global electricity usage estimates that in the worst-case scenario, the sector would use as much as 51% of electricity worldwide and contribute to up to 23% of greenhouse gas emissions in 2030. The authors state that this will happen if not enough progress is made in electricity efficiency of wireless access networks and fixed access networks/data centres.

The telecommunications industry has not proposed any solutions to the potentially enormous 5G carbon footprint. Its only response has been to speculate that future technological innovations and Artificial Intelligence *may* succeed in reducing energy consumption, an idea that is conjecture at this point in time.

Local groups including Byron Shire Climate Emergency Guidance Group, Zero Emissions Byron, COREM, Creative Mullumbimby, The Brunswick Valley Historical Society and Mullum SEED all reject an increase in energy consumption in the local community and beyond.³⁴

10. 5G would increase pollution and electronic waste

5G and related devices would also create a massive increase in pollution (from toxins released during mining and manufacturing of electronics) and electronic waste (from the discarding of products, due to planned and perceived obsolescence, containing toxic materials).

The central business district of Mullumbimby has an immediate proximity to the 95 Dalley Street site. Telstra do not take into consideration the cumulative electro smog pollution (WiFi, smart devices, Bluetooth etc) when calculating predictive EME reports and public exposure.³⁵ In the local Mullumbimby town and neighbouring Byron Bay, it has been well documented in the mainstream news that a large and vocal community do not consent to increases in RF EMR exposure from tower and base station upgrades; furthermore it has been proven by an accredited Building Biology expert³⁶ that exposure levels are already unacceptable in some densely populated local areas.³⁷

The personal privacy concerns of the IoT are so great that it has been described as the "IT asbestos of the future"³⁸. There is no plan in place to manage these risks or the mounting electronic waste as people remove "smart" devices from their homes to protect their security.

11. Wireless networks are a poor substitute for wired infrastructure

Many in our community are alarmed that secure, fixed landlines are being removed and replaced with wireless antennae that are unreliable due to being subject to weather conditions, fire and fallible electricity supply, and are insecure in terms of safety and privacy.

Fibre optic networks which provide faster broadband speeds, are safer, more cyber secure, and more reliable in rural areas than wireless networks. In addition, the advantages of using fixed broadband rather than wireless for moving large amounts of information will grow as data usage increases in the future.³⁹

³¹ <https://www.climatechangenews.com/2017/12/11/tsunami-data-consume-one-fifth-global-electricity-2025/>

³² <https://www.cio.com.au/article/658317/5g-use-will-increase-energy-costs-study>

³³ On Global Electricity Usage of Communication Technology: Trends to 2030 Anders S. G. Andrae and Tomas Edler: www.mdpi.com/journal/challenges

³⁴ <https://www.byronnews.com.au/news/climate-strike-call-goes-out/3670427/>

³⁵ <https://www.rfnsa.com.au/embed-public-report-pdf/Z0FBQUFBQmVaM0syTDJRmVNWFiXODFCsXhxeUpMVXJlOEIzTGxeXV0bER3OFJMSVBadS1rWmdYalA0bVNiYWZBb1NRWXV0WVWlthm1ybmxpY3JfMiRlUaTVBTXY5OTM2VWc9PQ==>

³⁶ <https://www.aces.edu.au/#>

³⁷ <https://www.prime7.com.au/news/10689-radiation-fears>

³⁸ <https://www.verdict.co.uk/mikko-hypponen-smart-devices-it-asbestos/>

³⁹ https://www.nbnco.com.au/content/dam/nbnco2/2018/documents/media-centre/5G_report_June_2018.pdf, p.9

Optical fibre is totally secure because the signal is confined within the fibre. It is far less prone to failure than wireless technology. In terms of speed, optical fibre networks can ultimately be much faster than 5G and bring speeds of 10 gb/second to homes and businesses.⁴⁰ Optical fibre will be able to be upgraded to incredible speeds in the future, far more easily and economically than infrastructure intensive upgrades to wireless services. Paul Heroux Ph.D. (Professor of Electromagnetic Toxicology, Faculty of Medicine, McGill University) has explained how, “Any sophisticated society in the future will need and will depend on optical fibre.”⁴¹

Timothy Schoechle, PhD, communications technology expert, in his paper, *Re-Inventing Wires: The Future of Landlines and Networks*⁴², describes how wired infrastructure is inherently more future-proof, more reliable, more sustainable, more energy efficient, faster and safer than wireless networks which are laden with risks, technically limiting, undependable, energy intensive and relatively inefficient. He illustrates how wireless access service is not an adequate substitute for wires, and should be considered an adjunct to wired access service. He recommends that the goal should be to bring fibre as close to the user as possible, to use a copper tail for short distances where necessary, and to resort to wireless technology as a last resort.

Dr Schoechle opines that telecommunications service needs can be better met by wired infrastructure and/or still-emerging 4G LTE technology, stating:

“Wireless broadband access is not an adequate substitute for wired access (CTC, 2017). Millimeter wave (e.g., 5G wireless) backhaul is at best an on-the-cheap solution favored by corporations looking for short-term profits. It is wholly inadequate for a number reasons, among which is that it depends on an invasive and unstable complex millimeter wave hardware/software prone to (sometimes-planned) obsolescence. This complex approach contrasts sharply with the simplicity of basic future-proof fibre/hardwired facilities.”

In the Foreword to Dr Schoechle’s report, Frank Clegg (former President, Microsoft Canada) states:

“This paper sets the record straight ... offering consumers, business leaders and policy makers the critical facts they need to rethink a more intelligent and secure future with reliable, secure, wired communications more resilient to storm, flood and fire, and reducing the enormous carbon foot print from the present wireless approach. It also demonstrates why the mistaken upcoming 5G frenzy, with its millions of small cell antennas, destined to clutter all neighborhoods and public right-of-ways, is dangerous, wasteful and unnecessary.”

Furthermore, Mullumbimby already has the fixed line option of ADSL and the NBN network is in progress. This small town does not need 5G to secure an internet connection.

Conclusion

We are strongly opposed to the deployment of 5G in Mullumbimby as it is energy intensive, unreliable, insecure, wasteful, polluting, ugly, harmful to humans and the environment and unnecessary. Mullumbimby already has wired ADSL options and plans to deliver the secure fibre to the curb infrastructure; which can be utilised instead.

5G technology is being developed as it is being deployed. Its hypothetical business use cases may never evolve, and even if they do, may do more harm than good to the community.

Currently, Telstra is not giving consideration to the impact of the average and peak cumulative effects of non-ionising radiation on the Mullumbimby community; a 5G upgrade would further increase residents’, workers’ and visitors’ exposures to RF EMR.⁴³ Many residents do not consent to an increase in RF EMR (see petitions attached).

The National Toxicology Study⁴⁴ has affirmatively determined that there is a direct causal relationship between RF EMR and cancer.

In 2011, the International Agency on Research on Cancer (IARC), listed non-ionising radiofrequency electromagnetic radiation from cell phones and other wireless devices in Group 2B: Possibly carcinogenic to humans, alongside lead, engine exhaust and

⁴⁰ <https://www.globalresearch.ca/telecom-industry-did-no-research-health-impacts-5g/5673706>

⁴¹ interview with Dr Heroux, *Harmful Effects of 5G and Wireless*, 5G Crisis: Awareness and Accountability Summit, August 2019

⁴² <http://electromagnetichealth.org/wp-content/uploads/2018/05/Wires.pdf>

⁴³ <https://www.rfnsa.com.au/embed-public-report-pdf/Z0FBQUFBQmVaM0syTDJDRmVNWFIXODFCsXhxeUpMVXJI0EIZaTgxeXV0bER3OFJMSVBadS1rWmdYalA0bVNiYWZBb1NRWXV0VWlTbm1ybmxpY3JfMjRlTVBtXy5OTM2VWc9PQ==>

⁴⁴ *Cell phone radio frequency radiation* (2018) National Toxicology Program, US Department of Health and Human Services <https://ntp.niehs.nih.gov/results/areas/cellphones/index.html>

gasoline. Since then, leading scientists in the field have argued that the proof that wireless is carcinogenic has increased and IARC should upgrade the listing to a Group 2A: probably carcinogenic to humans or a Group 1: carcinogenic to humans classification.⁴⁵

The safety of 5G millimetre waves and phased array beamforming have not been anywhere near adequately tested and independent scientists are warning of catastrophic, even existential, risks to human health and the environment. When proposing to deploy 5G in Mullumbimby, Telstra is ignoring the opinions of over 250 internationally recognised doctors and scientists, from more than 40 different countries, all of whom have documented harmful effects of RF EMR.

On the risks of 5G, Professor Lennart Hardell (a world renowned oncologist from the Karolinska Institute in Sweden and Professor at Örebro University Hospital in Sweden) recently stated, "... if no action is currently taken, the costs to society will most likely be very high in terms of premature deaths, deteriorated public health and damage to the ecological system."

We refer Telstra to the legal opinion⁴⁶ of Danish lawyer, Christian Jensen, regarding health impacts of 5G.

It is the conclusion of this legal opinion that establishing and activating a 5G-network, as it is currently described, would be in contravention of current human and environmental laws enshrined in the European Convention on Human Rights, the UN Convention on the Rights of the Child, EU regulations, and the Bern- and Bonn-conventions.

The reason is the very significant body of scientific documentation available, showing that radiofrequency electromagnetic radiation is harmful and dangerous to the health of humans (particularly children), animals and plants. This also applies when the radiation remains within the limits recommended by ICNIRP and currently used in Denmark as well as broadly within the EU.

The ARPANSA Standard is one of the least protective standards in the world. It is based on guidelines created by a private organisation (ICNIRP) that has been alleged to have numerous commercial conflicts of interest and is not subject to independent regulatory examination.

ARPANSA states that, "The exposure limits in the ARPANSA Standard are only enforceable if they are referenced in other regulatory arrangements." The forward to RPS3 makes it clear that the onus is on industry to identify and manage risks from radiofrequency electromagnetic radiation (RF EMR).

We do not believe that Telstra is taking adequate precautions to limit the exposure of residents in Mullumbimby to RF EMR. It appears to us that Telstra sees the ridiculously high limits in RPS3 as a licence to ignore the large body of scientific evidence, and the opinions of the majority of experts, that exposures below those limits are unsafe. Telstra has no such licence.

We ask Telstra to apply the precautionary principle, as required by the Deployment Code, and halt its proposed deployment of 5G in Mullumbimby. If Telstra decides to continue with deployment of 5G in Mullumbimby, despite the community's objections, we request Telstra publish a written undertaking, addressed to the entire Mullumbimby population (existing and future), to compensate anyone who suffers loss or damage as a result.

Regards,

Administrators of Stop 5G Northern Rivers NSW

⁴⁵ Morgan, L.L., Miller, A.B., Sasco, A., Davis, D.L., (2015) *Mobile phone radiation causes brain tumors and should be classified as a probable human carcinogen*. Int. J. Oncol. 46 (5), 1865-1871 <https://www.ncbi.nlm.nih.gov/pubmed/25738972>

⁴⁶ https://drive.google.com/file/d/1ArfyCrCD_ZFb1gp0OhuTBdZSC9t9tJ9R/view, p.64

OBJECTION TO COUNCIL REGARDING 5G INSTALLATIONS

Dear Council of XXXX,

I write in relation to the planned implementation of the 5G cell rollout in our council area in general and near my (residential property/office/premise), in particular.

I am aware that wireless radiofrequency (RF) exposure has been linked to immediate and chronic illnesses including cancer, heart disease, infertility and neurological and genetic defects amongst many others.ⁱ This is substantiated in over 10,000 peer-reviewed scientific papers,ⁱⁱ including by the World Health Organisation, which classifies RF radiation as possibly carcinogenic (cancer-causing).ⁱⁱⁱ

Therefore it is the current rollout of the 5G infrastructure, including new towers/tower upgrades as well as new 4GX/5G small cells/antenna or antenna and cells that will be used for the 5G roll out, which is of great concern to me, due to the amount and type of radiation these will emit, and the detrimental effect this will have on my health, and potentially on other residents of [suburb].

I include a letter from my General Practitioner (GP) in relation to the potential impact EMF radiation will have on my health. (ATTACH LETTER IF AVAILABLE)

I refer the council to a journal article by Cindy L. Russell M.D., entitled '5G wireless telecommunications expansion: Public health and environmental implications', which provides further information regarding the scope of the 5G network and its public health hazards. In addition, the 'EUROPEAN EMF Guideline 2016 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses', explains the link between RF exposure and serious human diseases.

The opposition to the 5G roll-out is gaining traction in Perth, Australia wide, and other parts of the world. Recently Brussels, Geneva, as well as different States in America have moved to halt 5G rollouts in their cities due to the effects it would have on the health of its citizens.

I urge the council to consider its responsibility in ensuring the health, wellbeing, and safety of the citizens of [suburb]. The strongest evidence has impelled international experts to call for an urgent stop to the deployment of 5G technology. This should sufficiently warrant the council to take the precautionary principle and to do the same.

I am therefore asking the council to prevent any further expansion of 5G infrastructure in the city of [suburb] until further research can verify its safety. Specifically, I am asking the council to take action in ensuring that no 4GX or 5G small cell/antenna or any cells/antenna related to 5G technology will be installed near my premise [home/office/shop] and any existing ones to be switched off, and be removed immediately.

Please reply within the next 7 days with the actions the council will take to respond to my request.

Sincerely,

Name,
Address,
Email / phone

ⁱEUROPAEM EMF Guidelines 2016 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses, Reviews on Environmental Health 2016, 31(3).

ⁱⁱ EMF-Portal. (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. It systematically summarizes scientific research data on the effects of electromagnetic fields of radiation.)

ⁱⁱⁱ WHO, IARC Classifies Radiofrequency Electromagnetic Fields as Possibly Carcinogenic to Humans, 2011.

^{iv} Cindy L. Russell M.D., entitled '5G wireless telecommunications expansion: Public health and environmental implications', Journal of Environmental Research, 11 April 2018, 165:484-495.

LETTER TO A MINISTER

Sent: Friday, 6 September 2019 3:40 PM

To: Paul.Fletcher.MP@aph.gov.au

Subject: Public communications on the safety of 5G: where is the evidence?

Dear Minister

I read in an SMH article by Jennifer Duke today that the government “promises Telstra public support on 5G safety”. One clip reads as follows:

[Telstra network engineering executive Channa Seneviratne, speaking to *The Sydney Morning Herald* and *The Age* at Telstra’s enterprise-focused Vantage event in Melbourne, said Mr Fletcher had been shown scientific evidence that there were no major health concerns when it comes to 5G.

From a science-based point of view we’ve been able to demonstrate that the [radiation emissions from] 5G are of the same order as 4G and 3G and WiFi.]

Could you please send me the research showing the safety of 5G radiation? I am not aware of any study supporting such safety.

In the USA, both Democrats and Republicans have asked similar questions and failed to receive any evidence of research demonstrating safety.

For example, Senator Richard Blumenthal comments at the following link:

“There has been even more limited research with respect to the health ramifications of 5G technology, and the FCC has thus far failed to adequately explain how they have determined 5G is safe.”

<https://www.blumenthal.senate.gov/newsroom/press/release/at-senate-commerce-hearing-blumenthal-raises-concerns-on-5g-wireless-technologys-potential-health-risks>

A large group of scientists expert in this field (247 signatories at this point) has called for a moratorium on the rollout of 5G until the potential hazards for human health and the environment have **been investigated by scientists who are independent from industry**. www.5gappeal.eu/ The appeal begins:

“We the undersigned, scientists and doctors, recommend a moratorium on the roll-out of the fifth generation, 5G, for telecommunication until potential hazards for human health and the environment have been fully investigated by scientists independent from industry. 5G will substantially increase exposure to radiofrequency electromagnetic fields (RF-EMF) on top of the 2G, 3G, 4G, Wi-Fi, etc. for telecommunications already in place. RF-EMF has been proven to be harmful for humans and the environment.”

The research which exists suggests considerable reason for concern.

For example, Israeli scientists have shown the higher frequency millimetre waves intended for use with 5G could be a risk for human skin, with sweat ducts in the skin acting as antennas. They have sounded an alarm. Non-thermal biological impacts on the eye are certainly possible which could unleash an epidemic of eye disease. I have attached a couple of relevant articles, and a letter from Beatrice Golomb, Professor of Medicine at the University of California.

ARPANSA subscribes to an outdated model that does not recognise “non-thermal effects” and is not committed to a precautionary approach. Further, ARPANSA “does not accept any liability for any injury, loss or damage incurred by use of or reliance on the information provided on [its] website”.

I look forward to your advice listing studies showing the safety of 5G and in particular mmWave band frequencies. The research I have seen to date suggests anything but safety. Given ARPANSA’s disclaimer quoted above, I think that the government can certainly expect legal action to be taken for irresponsible assurances given to the public. Various moratoriums have already been applied worldwide, as in Brussels and parts of Switzerland for example.

Regards

Dr Murray May
Canberra.

LETTER TO A STATE PREMIER

PLEASE PUT IN THE EMAIL SUBJECT LINE: I call for an immediate halt to the 5G rollout.

Date
Name
Address/email

Dear xxxxx

I am XXXX, and I am writing to you today about the importance of having a healthy immune system during this time where people are so concerned about SARS-Cov-2; and how the Government's endorsement of the 5G network deployment (and current fast-tracking thereof), will cause harm to the general population at a time where we are being told to remain healthy and look after our immune systems.

Individuals with compromised immune systems are in the high-risk category for developing Covid-19 once being infected with SARS-Cov-2, and governing bodies have advised that individuals with a compromised immune system should be especially vigilant during the pandemic of Covid-19(1).

Given that people's immune systems are susceptible to the effects of electromagnetic radiation, and these effects will be worsened by 5G, it is of great concern that Telstra has commenced its trials of the 5G millimetre wave at 26GHz and has announced that it is bringing "forward \$500m of capital spending on our networks from next financial year to this calendar year to accelerate the 5G rollout and support the economy"(2). Of particular concern is the fact that Telstra's 5G trials will not assess health effects on nearby people and environment.

In consideration of the above, I seek the explanation as to why 5G is being rolled out rapidly across Australia when the health effects of 5G have not been adequately studied and the Parliamentary Inquiry into 5G is incomplete.

I request answers to the following questions and ask that you not respond with assurances that Australia's levels are safe because they comply with the ARPANSA 'standard'(3), as the ARPANSA Standard is outdated and incomplete (4), and Australia has the highest allowable power density limits in the world, at 1000uW/cm2, while other countries are as low as 10-100uW/cm2 (5).

1. There is a large body of scientific evidence demonstrating that EMFs negatively affect one's immune system and other body functions. We are already exposed to high levels of EMFs – why at this crucial time, would we add to this already unsafe exposure (see for example (a) to (h) below)?

a. Disturbance of the immune system by electromagnetic fields-A potentially underlying cause for cellular damage and tissue repair reduction which could lead to disease and impairment...
<https://www.ncbi.nlm.nih.gov/pubmed/19398310>

b. Extremely low frequency electromagnetic fields stimulation modulates autoimmunity and immune responses... <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5270416/>

c. Combined effects of traffic and electromagnetic fields on the immune system of fertile atopic women... <http://www.ncbi.nlm.nih.gov/pubmed/10943077>

d. Specific symptoms and radiation from mobile basis stations in Selbitz, Bavaria, Germany: evidence for a dose-effect relationship <http://www.emf-portal.de/viewer.php?l=e&aid=18762>

e. Low intensity microwave radiation induced oxidative stress, inflammatory response and DNA damage in rat brain... <http://www.ncbi.nlm.nih.gov/pubmed/26511840>

f. Microwave radiation induced oxidative stress, cognitive impairment and inflammation in brain of Fischer rats... <http://www.emf-portal.de/viewer.php?aid=23417&l=e>

g. Maternal exposure to magnetic fields during pregnancy in relation to the risk of asthma in offspring... <http://www.ncbi.nlm.nih.gov/pubmed/21810627>

h. Effects of exposure to GSM mobile phone base station signals on salivary cortisol, alpha-amylase, and

immunoglobulin A... <http://www.ncbi.nlm.nih.gov/pubmed/20708499>

i. Microwave radiation (2.45 GHz)-induced oxidative stress: Whole-body exposure effect on histopathology of Wistar rats... <http://www.ncbi.nlm.nih.gov/pubmed/27362544>

j. Effects of low-intensity extremely high frequency electromagnetic radiation on chromatin structure of lymphoid cells in vivo and in vitro... <https://www.ncbi.nlm.nih.gov/pubmed/12677665?dopt=Abstract>

k. New data for proving the presence of significant effects of electromagnetic exposure (to autoimmune changes in rats) <https://www.ncbi.nlm.nih.gov/pubmed/22384724>

l. Confirmation studies of Soviet research on immunological effects of microwaves... <https://www.emf-portal.org/en/article/18632>

2. The Parliamentary 5G Inquiry is still open and there has been no conclusion (6). There were 537 submissions (the vast majority being against 5G), including extensive submissions backed by scientific evidence from organisations such as the Oceania Radiofrequency Scientific Advisory Association (ORSAA) and Environment and Communities Safe From Radiation (ECSFR). Why is the information provided by these experts being ignored? Why are telcos not consulting the independent scientific community (a major stakeholder) who has expressed grave concerns about the risks 5G and called for a moratorium on the roll-out? Why is the 5G rollout going ahead before when this Inquiry has been completed?

3. Dr Steve Conway (Swinburne University of Technology) stated on *The Project* on March 22nd that, “5G has a very small signal range... That means every 100 metres you are going to need physical infrastructure...”. Both Dr Conway and Laurie Patton (Vice President – Telecommunications Society of Australia) point out that the solution to the current demand for Internet usage is to fix the NBN, for which we already have the existing infrastructure. It seems obvious that NBN is the best option on so many levels, such as health, security, economics and timeliness. Please explain why this option is not being prioritised.

4. Given that our Government has pledged that the health of the Australian citizens is more important than economic growth during this time, please provide evidence (if any exists) that implementing untested 5G infrastructure will benefit the health of Australian citizens and that it will not lead to disruption of primary services such as power and telecommunications, both of which are critical during this “State of Emergency”.

5. Can the Government assure the people of Australia that no conflicts of interest exist in the National Covid 19 Coordination Commission, particularly with respect to Executive Board members who have ties to the telecommunications industry, as these could well sway decisions in favour of telecommunications industry to detriment of the health of the Australian people.

Failure to respond with detailed particularity to questions and concerns that the general public has previously raised shall be considered as a blatant and negligent disregard for the health and well-being of the Australian people.

Given the severity of this matter I request that a response is provided by the addressee within 10 business days of receipt of this letter.

Kind regards,

XXXX.

References:

1. <https://www.cdc.gov/.../specific-g.../people-at-higher-risk.html>
2. <https://exchange.telstra.com.au/getting-through-covid-19-t.../>
3. <https://ecsfr.com.au/unpacking-arpansa/>
4. <https://www.arpansa.gov.au/about-us/disclaimer>
5. <http://phiremedical.org/safety-limits-and-political-confli.../>
6. https://www.apf.gov.au/Parliamentary_Bu.../.../Communications/5G

PETITION

International Appeal to Stop 5G on Earth and in Space

A petition signed by over 200 international scientists setting out information on what 5G is, discusses the satellites to be launched and links to many peer reviewed articles on the negative impacts of EMFs.

<https://www.5gspaceappeal.org/the-appeal>

INTRODUCTION TO 5G

Australian radiofrequency spectrum plan (2017)

<https://www.acma.gov.au/theacma/australian-radiofrequency-spectrum-plan-spectrum-planning-acma>

https://www.acma.gov.au/-/media/Spectrum-Engineering/Image/Spectrum_Illustrated-png.png?la=en

Health Implications of Long-term Exposure to Electromog- Karl Hecht

http://kompetenzinitiative.net/KIT/wp-content/uploads/2016/07/KI_Brochure-6_K_Hecht_web.pdf

What is 5G?

https://www.youtube.com/watch?v=MC_Sfkh5-zQ

5G, birds, bees and humanity. Arthur Firstenburg.

https://www.youtube.com/watch?v=MpdJ_t5XMvw

Building Biology – 5G

<https://www.buildingbiology.com.au/hazards/5g-the-internet-of-things-iot.html>

5G is the risk worth the reward?

<https://www.fxmedicine.com.au/content/5g-technology-risk-worth-reward-nicole-bijlsma>

Australasian Society of Building Biologists Position Statement (see references)

<https://asbb.org.au/5g-whitepaper/>

Wireless Industry Confesses “No Studies Show 5G is Safe”. US Senator Blumenthal Raises Concerns on 5G Wireless Technology Health Risks at Senate Hearing:

<https://www.youtube.com/watch?v=ekNC0J3xx1w>

Professor Emeritus of Biochemistry and Basic Medical Sciences, Martin Pall:

<https://www.youtube.com/watch?v=lulKq3FMGGs>

5G Gigantic health hazard – Barrie Trower & Sir Julian Rose. Video. 14 December 2018:

<https://www.youtube.com/watch?v=DLVlbPtNrVo>

5G explainer video:

<https://www.youtube.com/watch?v=ESmIKsTOFto>

The 5G unknown risks video:

https://www.youtube.com/watch?time_continue=2&v=JKaoLxw0qJl

Generation Zapped official trailer:

<https://www.youtube.com/watch?v=h7R4gKs8Vil&vl=en>

European Parliament: 5G Deployment: State of Play in Europe, USA and Asia. April 2019:

[http://www.europarl.europa.eu/RegData/etudes/IDAN/2019/631060/IPOL_IDA\(2019\)631060_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2019/631060/IPOL_IDA(2019)631060_EN.pdf)

5G: The Dominoes Are Starting to Fall

<https://www.globalresearch.ca/5g-dominoes-starting-fall/5674715>

5G Technology: The Greatest Conspiracy of All Time?

https://www.youtube.com/watch?v=ChS3J893rpl&feature=youtu.be&fbclid=IwAR1JG-d0VH7v7_6TWQ7mlecEEjLID7eNXOH11DGOYT3tA-JP57FnxwPtDA8YtfyWi24g7inIY-xvsYSBZ4sM#.XPP8FgoaEJc.facebook

Prof. Olle Johannsson on Wi-Fi “Irreversible sterility within five generations”:

<https://www.youtube.com/watch?v=BH3gJctqKk4>

HEALTH OVERVIEW

WHO Classification OF EMF As a Class 2(B) Possible Carcinogen

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Lancet article dated December 2018 ‘Planetary electromagnetic pollution: is it time to assess its impact?’

<https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196%2818%2930221-3/fulltext?fbclid=IwAR18aq6BxWprna1gxLKcMFqMoPIZGA2wc-YtfyWi24g7inIY-xvsYSBZ4sM#.XPP8FgoaEJc.facebook>

Community concerns over 5G: Needless anxiety or wise precaution? Don Maisch July 2019

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https://ehtrust.org/wp-content/uploads/5G_What-You-Need-to-Know.pdf

RESEARCH ON IMPACT OF EMFs ON HEALTH

National Toxicology Programme Study - November 2018

NPT Technical Report On The Toxicology & Carcinogenesis Studies In Hsd:Sprague Dawley Rats Exposed To Whole-Body Radio Frequency Radiation At A Frequency (900 MHz) And Modulations (GSM And CDMA) Used Cell Phones

<https://ntp.niehs.nih.gov/results/areas/cellphones/index.html#studies>

https://ntp.niehs.nih.gov/ntp/htdocs/lt_rpts/tr595_508.pdf

Information and explanations about the National Toxicology Programme Study

<https://ehtrust.org/cell-phone-radiofrequency-radiation-study/>

Cesare Maltoni Cancer Research Center, Ramazzini Institute, 2018

Report of final results regarding brain and heart tumours in Sprague-Dawley rats exposed from prenatal life until natural death to mobile phone radiofrequency field representative of 1.8 GHz GSM base station environmental emission. The Ramazzini Institute findings on far field exposure to RFR are consistent with and reinforce the results of the NTP study on near field exposure, as both reported an increase in the incidence of tumours of the brain and heart in RFR-exposed Sprague-Dawley rats.

<https://www.ncbi.nlm.nih.gov/pubmed/29530389>

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<https://link.springer.com/content/pdf/10.1007%2Fs12026-016-8825-7.pdf>

WHO International Agency for Research on Cancer Monograph Working Group: Carcinogenicity of radiofrequency electromagnetic fields

<https://www.ncbi.nlm.nih.gov/pubmed/21845765>

Thermal and non-thermal health effects of low intensity non-ionizing radiation: An international perspective

<https://www.ncbi.nlm.nih.gov/pubmed/30025338>

Cancer epidemiology update, following the 2011 IARC evaluation of radiofrequency electromagnetic fields (Monograph 102)

<https://www.sciencedirect.com/science/article/abs/pii/S0013935118303475?via%3Dihub>

Report of final results regarding brain and heart tumours in Sprague-Dawley rats exposed from prenatal life until natural death to mobile phone radiofrequency field representative of a 1.8 GHz GSM base station environmental emission

<https://www.ncbi.nlm.nih.gov/pubmed/29530389>

Evaluation of Mobile Phone and Cordless Phone Use and Glioma Risk Using the Bradford Hill Viewpoints from 1965 on Association or Causation

<https://www.ncbi.nlm.nih.gov/pubmed/28401165>

Oxidative mechanisms of biological activity of low-intensity radiofrequency radiation

<https://www.tandfonline.com/doi/full/10.3109/15368378.2015.1043557>

2.45 GHz Microwave Irradiation Adversely Affects Reproductive Function in Male Mouse, *Mus musculus* by Inducing Oxidative and Nitrosative Stress

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Joint actions of environmental nonionizing electromagnetic fields and chemical pollution in cancer promotion

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1567752/>

Oxidative stress in biological systems

https://www.researchgate.net/publication/279863242_Oxidative_mechanisms_of_biological_activity_of_low-intensity_radiofrequency_radiation

The implications of non-linear biological oscillations on human electrophysiology for electrohypersensitivity (EHS) and multiple chemical sensitivity

<https://www.ncbi.nlm.nih.gov/pubmed/26368042>

Biological effects from exposure to electromagnetic radiation emitted by cell tower base stations and other antenna arrays

<https://www.nrcresearchpress.com/doi/10.1139/A10-018#.XoIMPG5uKUK>

Base stations and wireless networks : exposures and health consequences : proceedings, International Workshop on Base Stations and Wireless Networks

<https://apps.who.int/iris/handle/10665/43698>

Extra-low-frequency magnetic fields alter cancer cells through metabolic restriction.

<https://www.ncbi.nlm.nih.gov/pubmed/23915261>

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Most cancer in firefighters is due to radio-frequency radiation exposure not inhaled carcinogens.

<https://www.ncbi.nlm.nih.gov/pubmed/19464814>

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<https://www.ncbi.nlm.nih.gov/pubmed/12076339>

Cancer epidemiology update, following the 2011 IARC evaluation of radiofrequency electromagnetic fields

<https://www.sciencedirect.com/science/article/abs/pii/S0013935118303475>

Comments on the US National Toxicology Program technical reports on toxicology and carcinogenesis study in rats exposed to whole-body radiofrequency radiation at 900 MHz and in mice exposed to whole-body radiofrequency radiation at 1,900 MHz <https://www.ncbi.nlm.nih.gov/pubmed/30365129>

Mobile phone use and brain tumours in the CERENAT case-control study.

<https://www.ncbi.nlm.nih.gov/pubmed/24816517>

Mobile phone and cordless phone use and the risk for glioma - Analysis of pooled case-control studies in Sweden, 1997-2003 and 2007-2009

<https://www.ncbi.nlm.nih.gov/pubmed/25466607/>

Multifocal Breast Cancer in Young Women with Prolonged Contact between Their Breasts and Their Cellular Phones

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3789302/>

Tumour promotion by exposure to radiofrequency electromagnetic fields below exposure limits for humans

<https://www.sciencedirect.com/science/article/abs/pii/S0006291X15003988>

An experimental study on effects of radiofrequency electromagnetic fields on sleep in healthy elderly males and females: Gender matters!

<https://www.ncbi.nlm.nih.gov/pubmed/32014649>

Radiofrequency radiation from nearby mobile phone base stations-a case comparison of one low and one high exposure apartment.

<https://www.ncbi.nlm.nih.gov/pubmed/31612047>

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<https://www.ncbi.nlm.nih.gov/pubmed/25466607>

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<https://www.fda.gov/media/135043/download>

Melatonin metabolite excretion among cellular telephone users

https://www.researchgate.net/publication/240072883_Melatonin_metabolite_excretion_among_cellular_telephone_users

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<https://pubmed.ncbi.nlm.nih.gov/12168254/>

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<https://bioinitiative.org/rf-color-charts/>

Reliable disease biomarkers for EHS and MCS

<https://www.ncbi.nlm.nih.gov/pubmed/26613326>

<https://www.emfanalysis.com/wp-content/uploads/2015/12/Belpomme-EHS-Biomarker-Study-2015.pdf>

Radiofrequency exposure in young and old: different sensitivities in light of age-relevant natural differences

<https://www.ncbi.nlm.nih.gov/pubmed/26613328>

Kheifets L, Repacholi M, Saunders R, van Deventer E. The sensitivity of children to electromagnetic fields

<https://pediatrics.aappublications.org/content/116/2/e303>

EUROPAEM EMF Guideline 2015 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses

<https://www.degruyter.com/downloadpdf/j/reveh.2016.31.issue-3/reveh-2016-0011/reveh-2016-0011.pdf>

De Luca et al. Metabolic and genetic screening of EHS subjects

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4000647/>

Electromagnetic hypersensitivity: a systematic review of provocation studies.

<https://www.ncbi.nlm.nih.gov/pubmed/15784787>

Electromagnetic fields act *via* activation of voltage-gated calcium channels to produce beneficial or adverse effects

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3780531/>

Effects of GSM modulated radio-frequency electromagnetic radiation on permeability of blood–brain barrier in male & female rats

<https://www.sciencedirect.com/science/article/pii/S0891061815001064>

The Seletun Scientific Statement Lower EMF Standards for World Health Are Urgently Needed

<http://www.iemfa.org/seletun-statement/>

Mobile Phone Masts

<https://www.powerwatch.org.uk/rf/masts.asp>

WiFi and Health

<https://www.powerwatch.org.uk/rf/wifi.asp>

EFFECTS OF CELL PHONE USE ON HEALTH & WELLBEING

Effects of cell phone use on semen parameters: Results from the MARHCS cohort study in Chongqing, China.

<https://www.ncbi.nlm.nih.gov/pubmed/26949865/>

Microwaves from Mobile Phones Inhibit 53BP1 Focus Formation in Human Stem Cells More Strongly Than in Differentiated Cells: Possible Mechanistic Link to Cancer Risk

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2854769/>

Effects of cellular phone emissions on sperm motility in rats

<https://www.sciencedirect.com/science/article/pii/S0015028207000490>

Effect of cell phone usage on semen analysis in men attending infertility clinic: an observational study

<https://www.sciencedirect.com/science/article/pii/S0015028207003329>

Pooled analysis of case-control studies on acoustic neuroma diagnosed 1997–2003 and 2007–2009 and use of mobile and cordless phones

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3829779/>

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<https://www.ncbi.nlm.nih.gov/pubmed/19328536/>

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<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3829779/>

Cordless Phones

<https://www.powerwatch.org.uk/rf/dect.asp>

Radio and TV, Tetra, Radar, Microwave Ovens

<https://www.powerwatch.org.uk/rf/other.asp>

Wireless Technology – A Danger We Can't Live Without

<https://www.buildingbiology.com.au/hazards/wireless-technology.html/attachment/attachment-wireless-technology-a-danger-we-cant-live-without>

Mobile Phone Base Station Tower Settings Adjacent to School Buildings: Impact on Students' Cognitive Health

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Compilation of studies on EMFs and Cancer

https://www.wesaynoto5ginaustralia.com/cancer-research?fbclid=IwAR0E_pgLWrX7ggBsiNiDciOLSyvlantBRVvWx1oEMgg4RX-igwcqPUQqdQ0

Compilation of Research Studies on Cell Tower Radiation and Health

<https://ehtrust.org/science/cell-towers-and-cell-antennae/compilation-of-research-studies-on-cell-tower-radiation-and-health/>

Peer-Reviewed Research Studies on Wi-Fi

<https://ehtrust.org/science/peer-reviewed-research-studies-on-wi-fi/>

Peer-Reviewed Scientific Studies on EMF-related Subjects

<https://www.powerwatch.org.uk/science/studies.asp>

Radiation Protection in Conflict with Science - A Documentation - Franz Adlkofer and Karl Richter

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ELECTROMAGNETIC HYPERSENSITIVITY (EHS)

Electrohypersensitivity as a Newly Identified and Characterized Neurologic Pathological Disorder: How to Diagnose, Treat, and Prevent It

<https://www.mdpi.com/1422-0067/21/6/1915/htm>

Common symptoms of EHS include headaches, cognitive difficulties, sleep problems, dizziness, depression, fatigue, skin rashes, tinnitus and flu-like symptoms

<https://www.degruyter.com/view/journals/reveh/30/4/article-p217.xml>

Electromagnetic hypersensitivity-an increasing challenge to the medical profession

<https://www.degruyter.com/view/journals/reveh/30/4/article-p209.xml>

The Medical Perspective on Environmental Sensitivities

https://www.chrc-ccdp.gc.ca/sites/default/files/envsensitivity_en.pdf

Development and evaluation of the electromagnetic hypersensitivity questionnaire

<https://onlinelibrary.wiley.com/doi/abs/10.1002/bem.20279>

Aspects of studies on the functional impairment electrohypersensitivity
<https://iopscience.iop.org/article/10.1088/1755-1315/10/1/012005>

EUROPAEM EMF Guideline 2016 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses
<https://www.degruyter.com/view/journals/reveh/31/3/article-p363.xml>

CHILDREN & WIRELESS

Children and wireless
<https://ehtrust.org/take-action/educate-yourself/children-and-wireless-faqs/>

iPads and Tablets: Health Risks, Safety Risks, and Practical Solutions
<https://ehtrust.org/take-action/educate-yourself/ipads-tablets-health-risks-safety-risks-practical-solutions/>

Measurements of radiofrequency radiation with a body-borne exposimeter in Swedish Schools with WiFi
<https://www.frontiersin.org/articles/10.3389/fpubh.2017.00279/full>

How Susceptible Are Genes to Mobile Phone Radiation?
http://competence-initiative.net/KIT/wp-content/uploads/2014/09/ki_howsusceptiblearegenes_screen.pdf

Wi-Fi in schools: the facts (2012)
<https://www.youtube.com/watch?v=kmcAXZ-o1K4>

WiFi Radiation in Schools Maryland Report, 2016
https://phpa.health.maryland.gov/OEHFP/EH/Shared%20Documents/CEHPAC/MD_CEHPAC_SchoolWiFi_022017_final.pdf

Hoc the Wifi (a tool for parents who are concerned about Wifi in schools)
– created by building biologist Suzanne Ryan
<https://hocthewifi.com/>

Working for Safe Technologies for Nurseries, Schools and Colleges
www.wifiinschools.org.uk/index.html

Supporting letters from scientists and medical experts
http://www.wifi-in-schools-australia.org/p/blog-page_3.html

Parents against Wifi in schools
<https://ecsfr.com.au/parents-against-wifi-in-schools/>

Radiofrequency exposure in young and old: different sensitivities in light of age-relevant natural differences.
<https://www.ncbi.nlm.nih.gov/pubmed/26613328>

Exposure limits: the underestimation of absorbed cell phone radiation, especially in children <https://www.ncbi.nlm.nih.gov/pubmed/21999884>

Absorption of wireless radiation in the child versus adult brain and eye from cell phone conversation or virtual reality
<https://www.sciencedirect.com/science/article/abs/pii/S0013935118302561>

Childhood brain tumour risk and its association with wireless phones: a commentary <https://www.ncbi.nlm.nih.gov/pubmed/22182218>

Numerical evaluation of human exposure to WiMax patch antenna in tablet or laptop <https://onlinelibrary.wiley.com/doi/abs/10.1002/bem.22128>

SAR simulations of EMF exposure due to tablet operation close to the user's body <https://ieeexplore.ieee.org/document/7369205>

Use of mobile phone during pregnancy and the risk of spontaneous abortion <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4416385/>

Maternal cell phone use during pregnancy, pregnancy duration and fetal growth in four birth cohorts
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6601518/>

Measurements of Radiofrequency Radiation with a Body-Borne Exposimeter in Swedish Schools with Wi-Fi
<https://www.frontiersin.org/articles/10.3389/fpubh.2017.00279/full>

Use of wireless telephones and self-reported health symptoms: a population-based study among Swedish adolescents
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2430957/>

AUTISM

Autism and EMF? Plausibility of a pathophysiological link
<https://www.ncbi.nlm.nih.gov/pubmed/24095003/>

Reliable disease biomarkers characterizing and identifying electrohypersensitivity and multiple chemical sensitivity as two etiopathogenic aspects of a unique pathological disorder
<https://www.ncbi.nlm.nih.gov/pubmed/26613326>

FERTILITY

Synergistic health effects between chemical pollutants and electromagnetic fields

<https://www.ncbi.nlm.nih.gov/pubmed/26598938>

Effect of mobile telephones on sperm quality: a systematic review and meta-analysis

<https://www.ncbi.nlm.nih.gov/pubmed/24927498>

The effects of radiofrequency electromagnetic radiation on sperm function

<https://www.ncbi.nlm.nih.gov/pubmed/27601711>

Effect of long-term exposure of 2.4 GHz radiofrequency radiation emitted from Wi-Fi equipment on testes functions

<https://www.tandfonline.com/doi/full/10.3109/15368378.2013.869752>

Effects of prenatal exposure to a 900 MHz electromagnetic field on 60-day-old rat testis and epididymal sperm quality

<https://www.tandfonline.com/doi/full/10.3109/10520295.2015.1060356>

Electromagnetic Fields, Pulsed Radiofrequency Radiation, and Epigenetics: How Wireless Technologies May Affect Childhood Development

<https://srcd.onlinelibrary.wiley.com/doi/abs/10.1111/cdev.12824>

DATABASES

Bioinitiative Report 2019

A Rationale for Biologically-based Public Exposure Standards for Electromagnetic Fields (ELF and RF)

<https://bioinitiative.org/table-of-contents/>

Most recent Independent Science on the Effect of Wireless Radiation on Human Health

<https://www.5gcrisis.com/scientific-studies>

Oceania Radiofrequency Scientific Advisory Association (ORSAA) research

<https://www.orsaa.org/research-papers.html>

Prove It – Database of more than 5,000 studies

<http://www.justproveit.net/content/studies>

EMF Portal Research Literature

<https://www.emf-portal.org/en>

EMFACTS

<https://www.emfacts.com/>

Physicians for Safe Technology

<https://mdsafetech.org/science/>

Environmental Health Trust

<http://www.ehstrust.org/>

The International EMF Scientist Appeal

Serves as a credible and influential voice from EMF (electromagnetic field) scientists who are urgently calling upon the United Nations and its sub-organisations, the WHO and UNEP, and all U.N. Member States, for greater health protection on EMF exposure.

<https://emfscientist.org/>

SCIENTISTS & DOCTORS DISCUSSING 5G ON VIDEO

Prof. Martin Pall (2014) How electromagnetic fields cause biological harm

<https://www.youtube.com/watch?v=PjtOjThPUO>

Prof Martin L Pall PhD, Professor Emeritus of Biochemistry and Basic Medical Sciences, Washington State University addressing the NIH – **The 5G Roll Out is Absolutely Insane**

https://www.wesaynoto5ginaustralia.com/?fbclid=IwAR0E_pqLWrx7qgBsiNjDciOLSyvlantBRVvWx1oEMgg4RX-jqwqPUQqdQO

Resonance Beings of Frequency

A Documentary film setting out clearly the issues we face with increasing EMFs in our environment from doctors and scientists studying this area and the reasons why the science is being ignored.

https://www.youtube.com/watch?v=YFR5EtO_zdM&fbclid=IwAR16-EUTaLWRnh-ZA1Ao2ioPpgpEpl-9T_UKdGUS3b9pbljGDal5HmhT-nw

The Truth About Mobile Phones and Wireless Radiation – Dr Devra Davis

<https://www.youtube.com/watch?v=BwyDCHf5iCY&feature=youtu.be>

Dr Charlie Teo and Dr Devra Davis discuss EMF/Cell Phone radiation at a lecture at UNSW Law School November 2015

<https://www.youtube.com/watch?v=yEfKf1OHsY&feature=youtu.be>

Ontario Doctor's Warn of Rising Health Care Costs After 5G Roll Out

C4ST's (Canadians for Safe Technology) issue a media release. On the panel: Frank Clegg (CEO of C4ST and previously 14 Years as President of Microsoft Canada), Dr Riina Bray MD, Dr Magda Havas PhD (Professor Emeritus at Trent University), Dr Anthony Miller (Professor Emeritus at University of Toronto), Dr Meg Sears
<https://www.youtube.com/watch?v=S16QI6-w9I8&feature=youtu.be>

Dr Dart (2014) The health effects of microwave radio exposures

<https://www.youtube.com/watch?v=dpQegD1D34k>

Dr Martin Pall

<https://scientists4wiredtech.com/2017/08/dr-martin-pall-opposes-sb649/>

ENVIRONMENTAL IMPACTS OF 5G

Birds, Bees and Mankind – Destroying nature by electrosmog Ulrich Warnke

http://competence-initiative.net/KIT/wp-content/uploads/2014/09/ki_beesbirdsandmankind_screen.pdf

Anthropogenic electromagnetic noise disrupts magnetic compass orientation in a migratory bird <https://www.nature.com/articles/nature13290>

Bees and insects

<https://www.nature.com/articles/s41598-018-22271-3>

<https://ehtrust.org/published-research-adverse-effect-wireless-technology-electromagnetic-radiation-bees/>

Bees, butterflies and wildlife

<https://ehtrust.org/science/bees-butterflies-wildlife-research-electromagnetic-fields-environment/>

Effect of high-frequency radiations on survival of the honeybee (*Apis mellifera* L.)

<https://link.springer.com/article/10.1007%2Fs13592-015-0421-7>

Trees and Plants

<https://ehtrust.org/electromagnetic-fields-impact-tree-plant-growth/>

Radiofrequency radiation injures trees around mobile phone base stations

<https://www.sciencedirect.com/science/article/pii/S0048969716317375?via%3Dihub>

Data Centres of the World Will Consume 1/5 of Earth's Power by 2025 - 12 Dec 2017

Links to research and highlights how the communications industry could be using 20% of the world's electricity by 2025, hampering global attempts to meet climate change targets due to digital data storage server farms that will be needed for the billions of smartphones and internet-connected devices grows exponentially for the Internet of Things.

<https://data-economy.com/data-centres-world-will-consume-1-5-earths-power-2025/>

‘Tsunami of data’ could consume one fifth of global electricity by 2025’

Article from Climate Change News.com dated 11 Dec 2017

<https://www.climatechangenews.com/2017/12/11/tsunami-data-consume-one-fifth-global-electricity-2025/>

Environmental Impacts from Rockets used to launch satellites

The first two 5G test satellites were launched by SpaceX in February of 2018. With the full set of 20,000 satellites scheduled to be launched into orbit during the next two years. To put this into perspective, as of September 2017 there were 1,738 operating satellites in orbit around the Earth. This means the number of satellites will be 11 times greater than the current number.

If the number of annual rocket launches increases by at least 10x, computer models suggest that the combination of ozone depletion and release of black soot could produce a three per cent warming effect over the Antarctic and reduce the ozone in the world's atmosphere by 4%. Rocket fuel is destructive to the Earth's ozone layer, which protects us from the effects of radiation from the sun. Rockets using solid fuel produce massive ozone depletion while rockets using liquid kerosene as fuel destroy less ozone but release massive amounts of black carbon soot into the air at high altitudes.

Microwaving Our Planet: The Environmental Impact of the Wireless Revolution, Arthur Firstenberg 1997

Rocket exhaust destroys ozone. It has been calculated that 9 Space Shuttles and 6 Titan IV launches per year would only put enough chlorine into the stratosphere to destroy 0.1% of its ozone (Prather et al. 1990). But few people seem to be considering what hundreds or thousands of launchings will do and are doing. Aleksandr Dunayev of the Russian space agency was quoted in 1989 as saying, "About 300 launches of the shuttle each year would be a catastrophe and the ozone would be completely destroyed" (Broad 1991). Rocket exhaust also produces acid rain and massive water pollution near launch sites, and contributes further to global warming by adding water vapour to the stratosphere.

www.avaate.org/IMG/doc/Microwaving_Our_Planet_firstenberg.doc

‘SpaceX is in communication with all but three of 60 Starlink satellites one month after launch’

Verge article dated 28 June 2019 confirms the first sixty satellites were launched in 2019 and three are already out of communication meaning they will fall to Earth. SpaceX will continue to launch batches of sixty satellites at a time, with the goal of getting between 1,000 to 2,000 spacecraft up each year. It should take about 24 launches to reach global Internet coverage. With each satellite only lasting 5 years they will need to constantly be launching them with the corresponding impact on the ozone layer and pollution contributing to climate change for the foreseeable future.

<https://www.theverge.com/2019/6/28/19154142/spacex-starlink-60-satellites-communication-internet-constellation>

<https://www.cellphonetaskforce.org/wifi-in-the-sky/>

<https://www.cellphonetaskforce.org/wifi-in-the-sky/>

<https://phys.org/news/2009-03-rocket-ozone-depletion.html>

<https://www.sciencedaily.com/releases/2009/03/090331153014.htm>

<https://www.theverge.com/2018/5/31/17287062/rocket-emissions-black-carbon-alumina-particles-ozone-layer-stratosphere>

<https://www.sciencefocus.com/space/what-is-the-environmental-impact-of-the-spacex-falcon-heavy-launch/>

<https://www.space.com/38884-rocket-exhaust-space-junk-pollution.html>

The International Astronomical Union – IAU

IAU issued a statement arguing that an uncrowded night sky is “not only essential to advancing our understanding of the Universe of which we are a part, but also as a resource for all humanity and for the protection of nocturnal wildlife ... We do not yet understand the impact of thousands of these visible satellites scattered across the night sky and despite their good intentions, these satellite constellations may threaten both.”

<https://www.iau.org/news/announcements/detail/ann19035/>

5G, millimetre waves AI AND THE INTERNET OF THINGS (IOT)

5G and the IOT: Scientific Overview of Human Health Risks

<https://ehtrust.org/key-issues/cell-phoneswireless/5g-networks-iot-scientific-overview-human-health-risks/>

<https://ehtrust.org/scientific-research-on-5g-and-health/>

About 5G and the Internet of Things

<https://ehtrust.org/key-issues/cell-phoneswireless/5g-internet-everything/>

Adverse health effects of 5G mobile networking technology under real-life conditions.

<https://www.ncbi.nlm.nih.gov/pubmed/31991167>

Building science and radiofrequency radiation: What makes smart and healthy buildings

<https://www.sciencedirect.com/science/article/pii/S0360132319305347>

"Systematic Derivation of Safety Limits for Time-varying 5G Radiofrequency Exposure Based on Analytical Models and Thermal Dose"

https://journals.lww.com/health-physics/Citation/2019/07000/Comments_on_Neufeld_and_Kuster_Systematic.9.aspx

Human skin as arrays of helical antennas in the millimeter and submillimeter wave range.

<https://www.ncbi.nlm.nih.gov/pubmed/18517913>

Millimetre waves or extremely high frequency electromagnetic fields in the environment: what are their effects on bacteria?

<https://www.ncbi.nlm.nih.gov/pubmed/27087527>

The human skin as a sub-THz receiver - Does 5G pose a danger to it or not?

<https://www.ncbi.nlm.nih.gov/pubmed/29459303>

Appeals that matter or not on a moratorium on the deployment of the fifth generation, 5G, for microwave radiation.

<https://www.ncbi.nlm.nih.gov/pubmed/32064102>

EXPOSURE STANDARDS

<https://www.youtube.com/watch?v=64SIGnAGeU>

<https://mdsafetech.files.wordpress.com/2018/09/conversion-chart-microwave-electromagnetic-radiation-pdf.pdf>

https://www.icnirp.org/cms/upload/publications/ICNIRPrfgdl2020.pdf?fbclid=IwAR2fHEDYhGHYH2Q_YdL2q4iF4ZtotOine3LykRhFWN4Gue5TQp-MGZcbRnQ

Maisch (2006) Conflict of interest and bias in health advisory committees

file:///C:/Users/HP/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/who_conflict%20(1).pdf

Maisch (2010) History of exposure standards in Australia. Political and corporate involvement with cell phone research in Australia.

file:///C:/Users/HP/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/Chap_16_updated_to_Aug_2018%20(1).pdf

The Procrustean Approach – Setting Exposure Standards for Telecommunications Frequency Electromagnetic Radiation

<https://www.emfacts.com/the-procrustean-approach/>

Section 3 & 4 of BioInitiative Report. A rationale for biologically-based exposure standards for low intensity electromagnetic radiation, 2012

<https://bioinitiative.org/>

Source of Funding and Results of Studies of Health Effects of Mobile Phone Use: Systematic Review of Experimental Studies'

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1797826/>

Prof Martin L Pall PhD, Professor Emeritus of Biochemistry and Basic Medical Sciences, Washington State University sent a 28-page forensic analysis of ARPANSA's approach:

The Minister for Health (The Hon Greg Hunt MP) and the Minister for Environment (The Hon Melissa Price MP) received a letter from Stop 5G Perth and Australia wide seeking a response from ARPANSA. The letter sought information about the role of ARPANSA and the health impacts of millimetre wave 5G technology. ARPANSA replied, downplaying any possible cause for alarm. On behalf of Stop 5G, Professor Martin Pall, PhD, Professor Emeritus of Biochemistry and Basic Medical Sciences, Washington State University, responded to ARPANSA's letter.

<https://stopmartmetersau.files.wordpress.com/2019/03/prof-pall-response-to-arpansa-letter-4-march-2019.pdf>

REDUCING ENVIRONMENTAL CANCER RISK: What We Can Do Now

https://deainfo.nci.nih.gov/advisory/pcp/annualReports/pcp08-09rpt/PCP_Report_08-09_508.pdf

5G IS BEING
ROLLED OUT WITH
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STRATEGIES TO REDUCE EXPOSURE TO EMFS AND CREATE HEALTHIER LIVING, LEARNING AND WORKING ENVIRONMENTS

- Use a hard-wired cable connection (preferably shielded cables) instead of wireless devices for computers (router/modem), printers, intercoms, baby monitors, solar panels, speakers, game consoles (game consoles can emit RFR even when switched off), lighting, heating, ventilation, air conditioning, thermostats and humidistats, security systems, smoke and carbon monoxide detectors, sprinklers, pool equipment etc..... (this is the most important and safest thing to do). Provide wired access points for all networking and data transmission.
- For improved security and lower carbon footprint, as well as reduced RFR, access data via a wired connection.
- Throughout the building provide connections to hardwired CAT6 or CAT7 ethernet cables (preferably shielded) to service devices in different locations throughout the building. Ensure Wi-Fi function is turned off when using hardwired connections.
- Avoid baby monitors, if you must use a baby monitor make sure that it is connected to the building wiring and located a distance away from the cot to reduce exposure to the AC magnetic field.
- Children should avoid using mobile phones except in emergency circumstances. Texting is a safer option.
- Cordless telephones should be replaced with a corded phone. Covert your mobile phone to a landline or a Skype landline number when possible. Keep phone and devices away from your body and head (at least 50cm).
- Use speaker phone, text instead of call or use an air tube ear piece.
- Turn on airplane mode as much as possible, with privacy 'location settings' OFF (when not using a map function).
- You may choose a mobile phone with a low Specific Absorption Rate (SAR). It is still important to keep calls short, use loud speaker etc.
- Do not purchase a tablet unless it can be used non-wirelessly. Connect the tablet (or laptop) to Ethernet with an adapter and cord.
- Always place a wireless device on a table, not the body, even when wireless antennas are turned off. Built in antennas emit frequencies that will expose the vital organs to microwave emissions.
- Put an iPad into flight mode when the app has been downloaded.
- Choose a non-communicating smart meter (type 4A), which would be manually read (with a probe). This meter does not emit microwave emissions. However, there may be dirty electricity (as is the case with any digital meter). To turn off the remote functionality of the meter however there will be fees involved to read the meter manually every 3 months. Note – at this stage, you do not have to replace your meter if it is not faulty.
- Do not buy appliances that don't allow you to turn Wi-Fi off. Disable all wireless transmitters on all devices.
- Ensure all laptops or notebooks have an Ethernet port and a switch to disable wireless functions.
- Do not use devices when there is a poor connection as it will increase your exposure to radiation.
- Avoid using devices in cars, elevators, trains and buses. Fit an external antenna to your car and avoid Bluetooth.
- Do not enable Bluetooth or Wi-Fi Calling on your smart phone and turn off mobile data when not in use.

- Reduce the amount of unnecessary time that you spend on devices - YES they are ADDICTIVE for a reason - to stimulate usage and drive economic benefits.
- Increase your distance from the source. Keep a distance from smart appliances and keep devices away from your bed or where you spend time.
- Do not buy 5G enabled devices as they are fitted with multiple antennas which can significantly increase your exposure.
- If you live in a unit - get friendly with your neighbours and ask them to turn Wi-Fi off when not in use - especially at night.
- Avoid physical shielding unless recommended by a professional who does not have ties with the shielding industry and will do 'before' and 'after' testing with professional equipment. Shielding can potentially INCREASE your exposure. You can consider metal fly screens to shield windows, or shielding paint, fabrics and foils for the walls and windows. Shielding is a last resort when there are no other options. Construction materials are less effective shielding materials to RFR in the MHz and lower GHz frequency ranges currently used, than higher GHz frequencies planned for 5G technologies. It is important to recognise that wireless functions must be turned off in shielded zones.
- Keep at least 400 metres away from a mobile phone base station. Keep a distance away from cell towers, radio and TV broadcast towers, and radar sights such as airports.
- Avoid installing a Femto Cell such as the Telstra Smart Antenna.
- If you are unable to remove wireless technology:
 - Do not put routers in occupied rooms (bedroom, living spaces...). Increase your distance from the source of RF EME. As you double the distance away from the source, you reduce your RF EME exposure by 75%.
 - Turn off ALL wireless devices when not in use (especially at night as they can continue to emit radiowaves continuously. Connect routers to a power source using a timer to turn off when not in use, especially at night. Ensure wireless routers and access points have an easily accessible switch to turn off when not in use.
 - Power down the router AT THE WALL SOCKET
 - Avoid modems that also act as public 'hot spots' such as Telstra Air.
- Watch the sunset and sunrise as much as possible. The sunrise and sunset have a distinct red/orange tinge of colour and these combinations provide the perfect balance to manage our circadian rhythm.
- Get earthed. Swim in the ocean or walk barefoot on damp grass!
- Keep electronic devices out of children's bedrooms and turn off all screens 1 hour (or at least 30minutes) before bedtime.
- Never allow children to sleep with a wireless device under their pillow, on or next to their bed.
- Please note: It is also recommended to reduce AC magnetic fields, AC electric fields and dirty electricity.
- If you are concerned about Wi-Fi at your child's school - check out the excellent resources by building biologist Suzanne Ryan. It is a great tool to help you communicate to your school about your concerns and provides you with information needed to request that your school Principal takes a precautionary approach to minimise children's exposure to Radio Frequency Electromagnetic Fields. Your concerns can be registered, which will honestly be of great use in the future! <https://hocthewifi.com/>
- Donate to Environment and Communities Safe From Radiation (ECSFR) who are working to GET Wi-Fi out of schools (plus so much more) to protect our children and the children of future generations. <https://www.gofundme.com/f/ecsfr>

We need reliable and fast internet. 5G will provide this.

We advocate for the use of safe technology. Wired connections are not only safer in terms of RF radiation exposure, other benefits include: connections are faster than wireless systems, connections are more reliable, and less prone to latency and delay issues, wired connections consume less energy and are more sustainable and wired connections reduce the security and privacy risks to personal data.

What is the difference between 4G and 5G?

Millimetre waves beaming at you that are reliant on small cells every 100m to 400m. Involuntary exposure of increased radiation levels, 24/7 and unable to opt out.

The Australian Government authority ARPANSA say it is safe!

The ARPANSA Standard is one of the least protective in the world and the radiation limits are 100 times higher than most countries. It is based only on thermal heating effects and does not set limits for long-term, non-thermal, round-the-clock RF EMR exposure. When setting the Standard, ARPANSA disregards Scientific evidence of adverse biological effects on human health from non-thermal exposures to RF EMR. ARPANSA are not medical advisory board. ARPANSA receive funding from Telcos. In 1999 Fed Govt stated ARPANSA had too much of a conflict of interest to be making safety standard decisions, yet in 2003 the federal govt adopted these standards. ARPANSA's website has a Disclaimer - education purposes only, for health advice-refer to Dr or Scientists.

There is no science showing harmful effects.

On the contrary there are over 10,000 peer-reviewed studies showing adverse biological effects from non-ionising radiation. There has been no testing of 5G to prove its safety. In fact, inside your phone is an RF exposure warning against prolonged use.

Science has not proven that wireless radiation is harmful so it must be safe.

There is no research to prove conclusively that the technology is safe.

5G does not penetrate the skin.

The sweat glands act as an antenna and water is a conductor of electromagnetic frequencies. You have 100 sweat glands within 1cm squared on the back of your hand alone, 300 sweat glands on your head.

There would be too many lawsuits if it wasn't safe.

Insurance companies deem radiation emissions by wireless technologies as a 'high' potential liability. EMFS are recommended as a 'pollutant' in the same category as Asbestos.

You will never stop it.

MULLUMBIMBY DID!!! Because the telcos couldn't prove that there are no cumulative impacts.

How can I protect my family?

Boycott all 5G services and devices. Hard wire your house or at least turn WiFi off at night. There are shielding products available but this must be done correctly or you can increase your exposure. Lobby your telco carrier for fibre optic wired connections.

Where do I start?

Find your TRIBE. Go to the start of the Kit! Write to your local council and member of parliament. Write a letter to the editor of your local newspaper. Join your local FB group and get active. Do Farmers Markets. Raise awareness by distributing flyers to businesses and local community. Connect with others who feel strongly on this issue, it is easier with support, particularly if speaking to the public. Have a volunteer registration sheet and petitions; people LOVE signing petitions.

CONCERNS ARE GROWING WORLD-WIDE
BECAUSE THERE ARE HEALTH AND
SAFETY RISKS ASSOCIATED WITH 5G



OR



ARE YOU AWARE?

- 5G is being rolled out NOW in Australia with no public consultation
- 5G will result in a massive increase in inescapable, involuntary exposure to wireless radiation
- Over 10,000 peer-reviewed studies document the health risks from existing EMR
- Over 26,000 scientists have signed the 5G Space Appeal petition opposing the roll out of 5G technology
- Brussels and Glastonbury halted the roll out of 5G due to health concerns
- Australia's radiation regulatory body (ARPANSA) accepts no "liability for injury, loss or damage incurred by use of or reliance on" their guidelines
- ARPANSA's "safe" level recommendation for RF EMR is one of the least protective in the world and 5 times higher than the Senate enquiry recommendation
- Children are at greatest risk of exposure issues and long-term damage
- Byron Shire Council have called for Australia's first moratorium on a 5G upgrade tower in Mullumbimby

WHAT CAN YOU DO?

- People are taking action globally and it's working!
- Get informed www.wesaynoto5ginaustralia.com
- Sign local, national and global Stop 5G petitions
- Download a Strategy Kit to halt 5G from www.ecsfr.com.au
- Share quality information amongst your family, friends and network



CONNECT WITH THE MOVEMENT ON FACEBOOK:

STOP5G AUSTRALIA

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