

To the Members of the Standing Committee on Communications and the Arts,

We are writing a submission to the *Inquiry into 5G in Australia*, on behalf of the 10,536 members of the We Say NO to 5G in Australia Facebook page, and the national network of 5G action and information groups that have formed since the page's creation in October 2018. The membership across all related groups is now over 55,000 people.

We are specifically writing on behalf of those members who were unable to or did not know how to write a submission to the Inquiry into 5G in Australia, due 1st November.

We would first like to thank the Committee for allowing late submissions to the inquiry.

We understand that you have received a number of submissions related to health, environmental, personal privacy, and economic concerns about the deployment, capability, and capacity of the 5G network across Australia.

Our members are obviously also concerned about these same issues, and the concerns around the predicted health effects from the deployment of the 5G network are echoed by tens of thousands of scientists, medical professionals, and other professions worldwide; whose signatures (172,395 in total) can be found at the *International Appeal – Stop 5G on Earth and in Space* website <https://www.5gspaceappeal.org/the-appeal>.

Research related to 5G can also be found in the 55 references in **Attachment 1**; along with 11 up-to-date news articles and other publications, taken from the Physicians for Safe Technology website <https://midsafetech.org/5g-telecommunications-science/>.

The resounding sentiment of our members (full list shown in **Attachment 2**) has resulted in putting forward two specific recommendations for the Committee to consider, investigate, and act upon as our elected representatives.

1. The outcome of the Inquiry into 5G in Australia should see a moratorium placed on the current and future-planned deployment of the 5G network technology in Australia, until consensus on the long-term safety of 5G technology on the human population and surrounding environment has been agreed to worldwide, by an independent body of scientists and medical professionals with no ties to the telecommunications industry, or Federal Government Departments and their associated portfolio agencies.
2. Following the moratorium, a full review into the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) Radiation Protection Series 3 (RPS3) in relation to the review process and type of science that defines our safe levels of exposure to electromagnetic radiation must occur, with the risk of non-ionising radiation considered as a matter of priority. Again, the review must be conducted by an independent body of scientists and medical professionals with no ties to the telecommunications industry, or Federal Government Departments and their associated portfolio agencies.

The reasons for our recommendations are listed below and are related to the deployment, capability and capacity of the 5G network in Australia. The Committee should analyse the following concerns of our members closely and make a determination on the deployment of 5G in Australia based on current science on non-ionising radiation, and the precautionary principle.

1. Deployment

The deployment of 5G raises the following concerns for our members:

- There is not a single peer-reviewed study that determines whether or not this technology is safe for humans, other living beings, or the environment to implement at any large scale. The mere fact that 5G technology has not been tested for health safety should stop any debate on whether to roll it out.
- What will be the cost to Australia's public health system be in the not-too-distant future if predicted health effects are seen following the deployment?

- It is worth considering that Lloyd's of London are excluding EMF exposure from their policies. Australia is Lloyd's fourth-largest market.
- The deployment of 5G technology in terms of safe public exposure levels is based on studies reviewed by ARPANSA that ignore the concerns of 100's scientists worldwide about the dangers of non-ionising radiation.
- As the Nuremburg Code forbids non-consensual experimentation on humans, how is the deployment of untested technology, which industry regulators have admitted there are "gaps" in knowledge about its effects and more studies are needed, allowed to be deployed?
- The deployment is already seeing massive power density increases on existing infrastructure, before small cells and wireless devices are added to the network. The ARPANSA limit of 1000uW/cm² is over 10-100x that of other developed nations, and 5x over the Senate Inquiry recommendation of 200uW/cm² in 2001, citing health concerns.

2. Capability

The capability of 5G raises the following concerns for our members:

- The capability of 5G will enable further development of the IoT, which is seeing the installation of 'smart cities' across the country. Who is monitoring the electromagnetic radiation emissions from smart city infrastructure in addition to the base station and small cell infrastructure?
- The capability of 5G is yet to be proven and members have stated while there are submissions to this inquiry in favour of what 5G promises to bring, thus far, there seems to be no submissions from the industry and technological sector describing a proven business case of how the capability of 5G will enhance our lives and not cause harm. The Committee should strongly consider this point and ask why the deployment of 5G should be allowed if the expected capability cannot be proven.
- Telecommunications companies have stated that the proposed frequency bands could be as high as 86GHz and that along with the use of mmWave technology, clusters of small cells will be required to enable the predicted capability of 5G. Has the Committee considered that to enable the capability of 5G, our landscape will be littered with antennas, approximately every 150m-300m?
- Telecommunications companies do not know how EME exclusion zones will be affected at higher frequency bands, as 5G is largely being developed as it is being deployed. What is known is that a larger exclusion zone is required than for 3G and 4G. With dense clusters of small cells required for higher frequencies, many people could be at-risk of severe exposure in apartment blocks or offices opposite antennas

3. Capacity

The capacity of 5G raises the following concerns for our members:

- Will the capacity of 5G provide everything industry have promised, and to do so, will extremely large power densities be required?
- How will the beam forming technology affect human health in high capacity areas; i.e. where there is a large concentration of 5G mobile and other wireless device users, how can the effects of beam forming penetration be measured and analysed before it is implemented?

We trust you understand the impact your decision could have on the Australian population and urge you to consider the information we have provided very carefully.

Sincerely,

We Say NO to 5G in Australia.

ATTACHMENT 1 – References

Newest Articles on 5G Concerns

1. **We Have No Reason to Believe 5G Is Safe. The technology is coming, but contrary to [what some people say](#), there could be health risks. (2019)** Scientific American. Joel M. Moskowitz. Oct 17, 2019. <https://blogs.scientificamerican.com/observations/we-have-no-reason-to-believe-5g-is-safe/>
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Published Literature: 5G, High Frequency, Gigahertz RF etc.

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[Zalyubovskaya-Declassif by CIA -1977 – biol eff mm waves](#)

ATTACHMENT 2 – List of Australian ‘Stop 5G’ groups and member totals

5G AUSTRALIAN BASED GROUPS	Members
We Say NO To 5G in Australia	10,536
We Say No To 5G IN Australia Action Group	605
5G Australia awareness group	481
5G, EMR and EMF Aware	222
5G network, microwave radiation dangers	5917
5G and other microwave towers map of Australia	244
5G Watch Australia	324
Australia says no to 5G Group	124
Stop5G Australia	6125
Stop 5G Australia Wide Action Group	1684
No 5G Australia	2102
Stop 5G in Canberra and Queanbeyan	186
5G - Sydney Under Attack	16
Make Byron Shire 5G FREE	230
NO 5G Illawarra and Southern Highlands	340
No 5G in the Blue Mountains	211
Refuse 5G and Protect the Blue Mountains	239
Stop 5G Central Coast	733
Stop5G Central West (NSW)	23
Stop 5g Eastern Suburbs and Sydney City	63
Stop 5g Georges River - Action group	84
Stop 5G Illawarra, South Coast NSW	124
Stop 5G Sydney	686
Stop 5G Sydney - Action Group	60
Stop 5G Inner West Group	44
Stop 5G Lismore	41
Stop5G in the City of Liverpool - South West	28
Stop 5G Maroubra	38
Stop 5G Mid North Coast	1995
Stop 5G Newcastle, Lake Macquarie, Hunter	277
Stop 5G Northern Beaches	1885
Stop 5G Northern Rivers NSW	2332
STOP 5G Port Macquarie	275

Stop 5G Sutherland	162
Stop 5G_Sydney Inner West	44
Stop 5G Sydney North Shore ACTION Group	35
Stop 5G Action Group - Tweed Shire NSW	333
Stop5G North West Sydney - the Hills District and Parramatta	123
Stop 5G Western Sydney	74
Stop 5G in Darwin	373
S5GG - Stop 5G Global (Brisbane based)	5094
5G - Brisbane Under Attack	62
5G Free Fraser Coast	143
5G Free Sunshine Coast	567
Maleny District NBN and 5G Info Group	285
No 4G, 4GX or future 5G Tower for Currumbin Valley	572
Stop 5G Brisbane	261
Stop 5G Gold Coast	431
Stop 5G Mackay and Surrounds	715
Stop 5G Maleny and Surrounds	59
No 5G Redcliffe	54
Stop 5G Adelaide & SA	1898
Stop 5G Tasmania	299
Stop5GTasmania (north/east)	54
Stop5GTasmania (north/west)	14
Stop5GTasmania (south/east)	25
Stop5GTasmania (south/west)	4
5G - Melbourne Under Attack	159
5G Awareness - Werribee, Hoppers and surrounds	61
5G, EMR and EMF Aware	222
Councils in Australia - Moratorium on 5G	44
5G Free Warrandyte	79
Stop 5G Frankston & Surrounds Group	169
Stop 5G Elwood 3184	47
Stop 5G Geelong	223
Stop 5G Genocide	180
Stop 5G - HillsTribe Dandenong Ranges Community	158
Stop 5G Melb Network	175
Stop 5G Melbourne	952
Stop 5G Maroondah	9
Stop5G Monash	19
Stop 5G on The Mornington Peninsula	103
Stop 5G in Torquay	151
Stop 5G Victoria	438
Stop 5G: Bendigo Awareness	233
Stop 5G South East Melbourne	175
Perth Council groups (combined)	847
Stop 5G Perth	970
TOTAL MEMBERS on 08/11/2019	55369