

Concerns regarding the implementation of 5G

from Northern Beaches resident Sarah Emmott-Bennett

In 2013 I was involved in getting Telstra to back away from putting a new phone tower 3m from the bedrooms of 2 young boys in Balgowlah Heights (both Manly Council and Mike Baird were supportive in our fight with Telstra). Before I had kids I was a lawyer so my contribution to that group opposing the tower was to get to grips with the Telecommunications Act and associated Ministers determination and any relevant case law.

LEGISLATIVE FRAMEWORK

1) **Essential service?**

Telcos given wide authority to install their infrastructure on the basis that they are an essential service like the provision of electricity. Telecommunications Act 1991 and the associated Communication Ministers Directive 1991.

2) **No Planning required**

The Minister for Communications can classify certain installations as “Low Impact” in the Directive which then means that they do not require planning permission from local Councils.

3) **Low impact often means higher potential health impact**

Low impact means low visual impact and has nothing to do with health. Ironically this often means a facility cannot be built in a park or on the foreshore because it would be an eyesore yet it can be built more easily in residential areas closer to people. So Low impact often means higher potential health impact yet it is easier for the Telcos to install.

4) **Self-regulation**

The self-regulation of this industry was subject to a Senate Review in 2011¹ and far-reaching changes were rejected as too bureaucratic and costly and emphasis was put on ARPANSA to ensure public safety instead and the Telcos were allowed to continue to self-regulate.

TELCOS

1) **Take no responsibility for the safety of their technology**

¹ Official Committee Hansard – Senate Environment and Communications Legislation Committee Telecommunications (Mobile Phone Towers) Bill 2011 Held Thursday 12 April 2012 - Canberra

They clearly direct this back to government. When John Romano (Telstra's Network Infrastructure Director) was asked by the Grandparents of the 2 boys whose bedroom was within 3m of the proposed tower we were fighting whether Telstra would guarantee there would be no adverse health affects for his grandsons and, if there were, who should he talk to Romano replied "we just build them you would have to talk to government about that".²

2) Research funding tied to Telcos

The original experts in this field were electrical engineers with some relationship to the Telcoms industry as they were the ones developing it. The Telco's fund most of the research and those that find issues with the technology find it hard to get more research grants. E.g. Lennart Hardell MD PhD University Hospital of Obrero (whose research was published in the IARC Monograph) has stated that:

"The problem is, however that one becomes dependant on this money. Most people do not bite the hand that feeds them"

and when we contacted him directly in 2013 he replied this:

"We are still doing research in this area, but as you may understand it is difficult to get grants as long as you are not one of the 'industry' persons and want to be independent. My experience is that finding cancer risks even lowers the possibility to get funding. It should be the other way."

3) Telcos not insurable

The Telcos can no longer get insurance coverage for their business. The European Parliament in it is resolution dated 2 April 2009 on health concerns associated with electromagnetic fields states that it:

" 27 is greatly concerned about the fact that insurance companies are tending to exclude coverage for the risks associated with EMFs from the scope of liability insurance policies, the implication clearly being that European insurers are already enforcing their version of the precautionary principle"

Telstra's 2004 Annual Report makes reference to its inability to get insurance and it is assumed that they now self-insure.

4) Covering their bases

The Telcos have stopped advertising mobile phones being held to anyone's ears and send text warnings to your phone reminding you that EMR has been classified as a possible carcinogen. The whole premise of the Telco's business is at risk if they concede there are any health issues, so they downplay the risks yet absolve themselves of responsibility at the same time.

² DVD of meeting with Telstra

5) **Bad faith and lies**

Despite their wide powers, the Telcos regularly act poorly towards local residents.

In our example in Balgowlah Heights, Telstra told Manly Council they had consulted with the Community, so Council confirmed they were then happy for Telstra to proceed. This was not true. Telstra had not consulted with the Community (in Breach of the Telecoms Code). This led Council to barricade the Ausgrid Pole that Telstra wanted to use.³ The barricade by rangers continued for 2 weeks. When Council ended the barricade before Christmas Telstra had confirmed that they would seek proper consultation. They then sent workers in to install the infrastructure shortly after Christmas when many residents were away. This led to a public demonstration and blockade of the pole by local residents with a local individual chaining himself to the pole. A number of us (including my children) were inside the fencing that Telstra had put around the pole. Telstra's installers proceeded to wrap blackout around the fencing so that we couldn't see out, nor could anyone see us inside. My children were scared at this point and Police told Telstra representatives to leave a small space for them to see out. Mike Baird came and dealt with the situation and Telstra were forced to hold a local community meeting.

6) **Install with low EME then up the levels by notice in the paper**

The Telcos regularly install new infrastructure at low levels of EMR then just put a notice in the paper to up the levels by 500% for example.⁴

SAFETY

ARPANSA (Australian Radiation protections and Nuclear Safety Agency), which reports to the Minister for Health and Pensions, is charged with determining safe levels of EMR.

AUSTRALIAN STANDARD

The adoption of Australia's safety standard was pushed through by industry without the agreement of the selected members of the relevant Australian Standards committee.

John Lincoln a former Clontarf resident (now in WA) who has a Bachelor of Electrical Engineering was involved in the original standard setting and a member of ARPANSA until 2013. This input is directly from him. He was part of the Standards Australia Committee at that time.

"They had a group of about 20 people from industry, community, unions and government. After a few years a Standard was drafted. Standards Australia required 2/3rds in favour to accept a Standard. The vote was only 60% in favour and the standard

³ Manly Daily "Manly Council gives Telstra poor reception" 21 Nov 2012; Manly Daily "Telstra to to explain Tower plan as blockade continues" 28 Nov 2012; Manly Daily "Telstra concrete pour blocked as Balgowlah Heights stand-off continues" 27 Nov 2012

⁴ Tower at Tania park increased by 500% within 100m of a pre-school. The closing date for residents concerns was mid June 2013 but Vodaphone only updated the EME report of the RFNSA website on 1st July 2013.

couldn't be passed. A little while later the job was handed over to ARPANSA who carefully selected a much smaller group, including me, John Lincoln, but mainly Telcos and government. A Standard was then produced exactly the same as the one rejected by SAA. One day we were thanked for our efforts and the meeting was closed. I asked "when do we vote on this?" Oh no, the committee doesn't get a vote, it gets reviewed by the Radiation Health Committee and they will decide! The RHC was mainly ARPANSA people and the Standard was produced. In the area of mobile technology the only deciding factor was heating effects".

ICNIRP

The standards adopted were those recommended by ICNIRP. ICNIRP is a private German registered organisation and they are self-perpetuating in that they decide themselves who joins. Many of those on ICNIRP had ties to the Telecommunications industry. This is a body of electrical scientists and not doctors.

ARPANSA

1) **Safety Standard won't heat your body tissue**

ARPANSA's safety level is set to that which will ensure that tissue does not heat up by more than 1 degree. It protects against all thermal effects. They acknowledge that their safety levels take no account of a-thermal effects.

2) **Standard limited to average pulse**

The safety level governs the average of the pulse and not the maximum of the pulse, nor the frequency of pulsing. A Jack hammer analogy is rather alarming here. A 30kg Jack hammer bouncing on concrete once does very little damage but if you set it to pulse quickly it breaks the concrete apart.

Australia's safety level is significantly higher than many other Countries. Note Russia has a long history of research into EMG (to weaponise it) and their limit is 100Mw/sqm compared to Australia's 4,250Mw/sqm at 870-890 Mhz.

3) **Limitations of Peer reviewed papers**

ARPANSA take a very scientific approach and will only consider peer-reviewed research. For research papers into long term a-thermal effects this means that the research must be undertaken for 10/20 years and then written up and then peer-reviewed (i.e. repeated independently). So there is little to go on. Dr Lennart Hardell produced 2 papers showing links to brain cancer but they were dismissed as they relied on users anecdotal levels of mobile phone use going back 10years.

4) **Take no account of what other countries are doing**

For example, France has removed WiFi from schools and Russia's National Committee for non-ionising radiation states:

*"today's children will spend essentially longer time using mobile phones, than today's adults will – there is an urgency to defend children's health from the influence of the EMF of the mobile communication system... the children using mobile communication are not able to realise that they subject their brain to EMF radiation and their health - to the risk.. We believe that this risk is not much lower than the risk to children's health from tobacco or alcohol. It is our professional obligation not to let damage the children's health by inactivity."*⁵

Brussels has just halted the roll out of 5G over health concerns (see article below).⁶

5) Industry influence

ARPANSA has 6 monthly EMERG meetings where they discuss issues.

These meetings include representatives from the Telecoms industry who have a dominating presence e.g. in the Meeting held on 14 May 2014⁷ the need for precautionary measures was discussed and Community members argued for precautionary limits to be adopted in the Standard

The following points from the Telecoms sector won the day:-

- "Precaution is currently addressed in the Telecoms Code. ARPANSA should be careful in extending precaution and precautionary limits may hinder technological advancement"
- "ARPANSA's current limit already addresses conservatism so provide additional information rather than regulation".
- "exposure limits in the standard should not be undermined by precautionary measures"
- "a precautionary approach could have negative impacts in society. A common sense approach based on scientific evidence is required."

They go on to state that ARPANSA will develop a clear whole of Government policy on the precautionary approach for application by the community on exposure to RF fields but I didn't find it.

6) Poorly resourced

⁵ <http://www.who.int/peh-emf/project/mapnatreps/RUSSIA%20report%202008.pdf>

⁶ <https://imherald.com/2019/04/05/brussels-becomes-first-major-city-to-ban-5g-wireless-connection/>

⁷ https://www.arpansa.gov.au/sites/default/files/legacy/pubs/aboutus/emerg/140514_EMERGsummary.pdf

ARPANSA itself is time/organisationally poor. In the first meeting that I attended in May 2013 Ken Karipidis (director of ARPANSA) discussed and dismissed all recent research. I suggested that maybe we should be looking for a Canary (like in the mines). Surely the most likely Canary would be an uptick in Brain cancer across Australia from the use of mobile phones. Dr Chris Baggoley, then Chief Medical officer for Australia agreed and directed ARPANSA to collect the data on Brain cancers. At the following meeting 6 months later this had not been actioned. Eventually a report/analysis was prepared on this and presented in 2018 (5 years later).

7) No resource to review a-thermal research papers

ARPANSA also appears to be cash, manpower poor... in their meeting on 8th May 2018⁸ they noted that limited agency resources and the re-deployment of key staff was limiting the agency's ability to progress the issue of providing electromagnetic hypersensitivity awareness for medical professionals. In the follow up meeting on 23rd October 2018⁹ they state that:

“ a request was made to utilise the medical (clinical) expertise in EMERG to review studies on oxidative stress. Members with medical expertise noted the size of the task meant this was unlikely, also noting ARPANSA does not have the resources to undertake a full systematic review of the studies.

8) Poor auditing of existing towers

ARPANSA have a history of not checking that existing towers are complying with safety limits. ACMA in 2013 had only audited 21 out of 18,000 base stations in the last 5 years in Australia¹⁰. On the ACMA.gov.au site under Mobile base station compliance they state that as a result of complaints they conducted an audit program from May 2013 to February 2014 – they audited 388 towers in NSW, identified 83 potential EME concerns and audited 26 sites.¹¹ Since then nothing?

9) Poor data collection of any issues experienced by the Public

There is an area to report on ARPANSA's website but its not easy to find and see 7) in terms of making Doctors aware of potential issues.

10) Condemnation of ARPANSA by Prof Martin L Pall PhD

Professor Emeritus of Biochemistry and Basic Medical Sciences, Washington State University in a 28 page letter. Which concludes:

⁸https://www.arpansa.gov.au/sites/default/files/emerg_meeting_summary_8_may_2018.pdf

⁹https://www.arpansa.gov.au/sites/default/files/emerg_summary_23_oct_2018_final_003.pdf

¹⁰ The Australian “In 13 years, only 99 mobile towers radiation tested” April 30th 2012

¹¹

<https://www.acma.gov.au/Citizen/Spectrum/About-spectrum/EME-hub/eme-and-mobile-base-station-compliance>

“With 100% consistency ARPANSA avoids all of the strongest available science in this area.

With 100% consistency ARPANSA has produced a stunningly biased document, whose positions are repeatedly and consistently contradicted by the strongest science and by large numbers of independent scientists.

With 100% consistency ARPANSA has failed to protect the health and safety of the people of Australia.

With 100% consistency ARPANSA has protected the economic interests of the telecommunications industry”¹².

RESEARCH

1) **Undue influence of Telcos polarising research**

It is argued there is undue influence of the Telcos in many papers particularly in the parameters of the research. The recent research paper issued by ARPANSA looking at incidences of Brain cancer was co-authored by two members of ICNIRP. This paper, which was co-ordinated by ARPANSA, showed no increase in brain cancers in Australia but they excluded those over 60 from the research. Conversely studies in Europe have shown a doubling of Glioblastomas over a similar time period. This ARPANSA co-ordinated research has been heavily criticised for excluding over 60s those with higher incidences of cancer. As the saying goes “Lies, damn lies and statistics!” See Dr Pall’s 28 page letter to ARPANSA criticising their approach.¹³

2) **Many Studies dismissed by ARPANSA**

Because there is no control population that has not been exposed to EMR and because, although they show biological changes, how those changes produce harm is less clear. Still the standard remains as a heating standard.

CONCERNS

- 1) Why is the Telcos expansion from 4G to 5G still treated like an essential service? Northern Beaches Council have confirmed that they have no say in the location of towers and are not really aware that Manly and the Northern beaches are to be the vanguard of 5G.

¹²

¹³

https://stopsmartmetersau.files.wordpress.com/2019/03/prof-pall-response-to-arpansa-letter-4-march-2019.pdf?fbclid=IwAR1uJArNBo57PWVse6aogSnLC22UbDf5kU4HQvyCFaboxJM7M_bXka1ma1E

- 2) Using a legislative framework established in 1991 to regulate a Telecoms industry that has grown beyond our imaginations seems irresponsible.
- 3) Allowing Telcos to effectively self-regulate is extremely dangerous. There is no incentive for them to safeguard public health. They take no responsibility for it.
- 4) There is plenty of evidence locally of bad faith and bad behaviour by the Telcos within the existing framework.
- 5) If insurers aren't prepared to take the risk on the technology then why on earth are we exposing whole populations?
- 6) It appears that no-one in Government is looking out for any long term effects but that must be what is relevant to the people.
- 7) ARPANSA doesn't have the resources to undertake reviews of the studies on oxidative stress (an a-thermal affect of EMR)
- 8) Where is ARPANSA's clear whole of government policy on the precautionary approach for application by the community on exposure to RF fields referred to in 14th May 2014 minutes?
- 9) Where is ARPANSA's approach to risk management framework referred to in the minutes from their 8th May 2018¹⁴ meeting (more than a year ago)?
- 10) Where is ARPANSA's fact sheet "How is scientific evidence assessed?" – hyperlink to their 24 May 2016¹⁵ meeting minutes goes no-where?
- 11) Why is ARPANSA so resource and time poor if, as they state in the minutes 24th May 2016,¹⁶ that according to a report prepared for the Australian Mobile Telecommunications Association there was a \$43 billion increase in Australia's economy due to productivity boost made possible by mobile telephony? And why is this even relevant to the body that decides safety standards?
- 12) Increasing demands for mobile downloads are going to inevitably push infrastructure closer into residential areas – this is no longer essential and some kind of regulation is needed.

¹⁴https://www.arpansa.gov.au/sites/default/files/emerg_meeting_summary_8_may_2018.pdf

¹⁵

<https://www.arpansa.gov.au/sites/default/files/legacy/pubs/aboutus/emerg/20160516-EMERG-Summary.pdf>

¹⁶

<https://www.arpansa.gov.au/sites/default/files/legacy/pubs/aboutus/emerg/20160516-EMERG-Summary.pdf>

13) If we are going to be experimented on, let's at least get some baseline data on the population. So, for example, in Kempten (West Germany 2007)¹⁷ doctors took Complete Blood Counts of residents before and after a tower was erected. The results showed significantly decreased amounts of serotonin (good mood hormone) and Melatonin (which boosts the immune system, fights cancers and protects from DNA damage).

14) Note this quote from the Financial Times¹⁸ "Big companies such as Qualcomm, Intel, Samsung and Apple see the country [Australia] as an interesting place to test products and Telstra was benefiting as a result, he added." And "Telstra can turn around its poor financial performance by launching one of the world's first fully commercial 5G services and becoming a global leader in the technology, said chief executive Andy Penn."

CONCLUSION

ARPANSA's role is not to facilitate the roll out of wireless. That is the role of the Minister for Communications and extremely wide powers are given under the Telecoms Act to facilitate this.

ARPANSA is the only government body charged with the protection of the public. To fulfil that role they need to apply a clear forward thinking process without undue influence from the telecoms sector. How is technology being used? Does research to date give us comfort that it is safe? Can we help people to protect themselves against possible issues/harm. E.g how easy would it be to suggest people switch off their WIFI at night?

Solely relying on peer -research gives the public limited confidence. In fact Ken Karipidis (Director of ARPANSA) admitted in an interview with ABC Radio National he cannot guarantee the safety of 5G.

ARPANSA need to both work forwards from available research but also be proactive and look at how people are using the technology and then ask "does research to date adequately cover this use and give the necessary comfort that the public is protected." And if not, where are the holes in the research and what should be done to protect the public given those holes. ARPANSA have improved on identifying the holes in the research but are still doing nothing to protect the public given those holes.

ARPANSA don't even issue warnings on the damage that having a mobile phone in your pocket can do to sperm motility (up to a 40% reduction in motility). The Centre for Disease control in British Columbia has been educating doctors about this since 2013. Even though this particular area of research is well established, the general public are blissfully unaware of any risks associated with this technology. There are some clear areas where warnings should be given and are given by other countries. To give a warning exposes the whole business of the Telcos. This is why Telco representatives should be removed from ARPANSA.

¹⁷ <http://weepnews.blogspot.com/2008/07/kempton-west-study-2007-english-version.html>

¹⁸ <https://www.ft.com/content/e69eae78-3669-11e9-bd3a-8b2a211d90d5>

Our Australian Government (through its agencies) is not working to protect the people. Big business has too much say. The function of the mobile phone has moved away from the nature of a utility and the balance between protecting the health of the community and the need for incremental technology such as 5G is now controversial and needs to be urgently reviewed.

A pharmaceutical company would subject a new drug to rigorous testing before launch. Why is technology such as this treated differently when it may have just as significant an effect on human health? However, unlike pharmaceuticals, the application of its effect is without the consent of the individuals affected in the case of mobile phone towers and the exposure is 24/7.