Mullumbimby NSW Australia Community Event.

The local Mullumbimby, Byron Bay community of northern NSW are trend setters in conservation of the environment. They also see that tourism in this area goes hand-in-hand with maintaining a pristine environment. The local community around Wilson Creek valley area with its unique first people’s (aboriginal) sacred sites are being put at risk with the constriction of an NBN communication tower with no archaeological survey. There are currently a number of people who live in the area for health reasons and are concerned this would increase the EMF-RF and would put their health at risk. These people had decided to live in this area because of the lower EMF background and abundant wildlife. Over 100 people attended this meeting and a number of people who attended had discovered that they have an environmental intolerance to EMF-RF and are electromagnetic hypersensitivity (EHS).

This community also see the need to maintain low background EMR-RF areas or “white spots” so that impacted individuals and their families can find sanctuary. With the addition of communication towers on the top of Mt Nadir (world heritage national park) local environmentalists have witnessed the disappearance of wildlife since the installation of these towers.

ORSAA was invited by the community group “Environment and Communities Safe from Radiation” (http://ecsfr.com.au/) to present at a community meeting in Mullumbimby in August. The group had safety concerns over a new telecommunications tower slated for Byron's Wilsons Creek area. They asked ORSAA to highlight the biological science vis-a-vis Radio and Microwave frequencies. ORSAA's Mr. Victor Leach presented and discussed ORSAA's database findings. The group had also invited medical and legal professionals to inform the community on those aspects of microwave transmission infrastructure. A specialist doctor (Dr Russell Cooper) presented on the adverse health consequences of microwave radiation exposure and blood testing in line with Professor Dominique Belpomme's EMR biomarkers guidelines. A barrister (Mr Raymond Broomhall) attended to give a legal
viewpoint on steps that could be taken with regard to reducing people's exposure to microwave emitting infrastructure.

We would like to thank Mr. Steven Lyons for preparing the two video's presentation below. Steven spent many hours editing out technical malfunctions and adding in the slides so the talk be easy to follow. ORSAA does not support safety devices but recognize that the filmmaker has the right to promote his product if we are using their intellectual property.

Mr Victor Leach's talk:  [https://vimeo.com/284863509](https://vimeo.com/284863509)

Dr Russell Cooper's talk:  [https://vimeo.com/284267284](https://vimeo.com/284267284)


**Hobart's Smart City Strategy perhaps not too Smart**

Commentary by Dr Don Maisch PhD., August 23, 2018

On 22 August, the Hobart city council put on the second of three public forums explaining to the audience Hobart's Smart City Strategy which the council hopes will enable Hobart to fully enjoy the advantages of the coming 5G communications network and the Internet of Things (IoT). To quote from their website:

*The City of Hobart is currently developing its first Smart City Strategy. The strategy will provide a roadmap for how the City of Hobart uses technology and data to better service the community’s needs, improve liveability, manage resources, drive economic activity and foster innovation. Hobart will face many challenges in the future and the strategy will look at ways to:*

*Manage growth;*
*Manage digital and social divides;*
*Protect our best qualities as we build a future city;*
*Build safer and inclusive communities; and*
*Share stakeholder data and learning through innovation.*

*Join the conversation*
Attend a Smart City Public Forum at the Hobart Town Hall from 6pm-8pm. 15 August:

Smart Cities: The art of possible 22 August: Smart Cities:

What you need to know 29 August: Smart Cities: Building a contemporary Australian City.

The presenters for the forum, Smart Cities: What you need to know, all gave a positive vision of the planned smart future for Hobart, one even suggesting that Hobart’s qualities as a pleasant city to live in was best protected by building a smart city. The Internet of Things (IoT) was mentioned as an integral part of Hobart’s future life. The only risk factors mentioned were in relation to people’s privacy, data collection, how data was used and the possibility of misuse such as by hacking, etc. The 'take-home' message for the audience at the forum was that the smart cities concept was a necessary future if the city wished to stay in tune the technology and the coming IoT future. Other than the issue of data security and privacy concerns, it seemed that the smart city concept had a relatively unproblematical and bright future.¹

The forum was very interesting but, for a public meeting claiming to inform the attendees what they "needed to know", it was woefully inadequate in relation to other unmentioned "risk factors" and how the technology works, or doesn't.

Consider:

* No mention was made that the smart city strategy necessitates the roll-out of 5G, using millimetre waves which will require the erection of many hundreds of special 5G antennas needed both externally and internally in buildings throughout the city.

* No mention was made on whether or not the public has any say in where these antennas are placed.

* No mention was made that these antennas have the potential to significantly increase exposure levels and antenna exclusion zones. According to Ericsson, the increased size of the exclusion

zone for 5G antennas makes the “5G network roll-out a major problem or impossible”.  

**No mention** was made that smart city 5G millimetre waves can be disrupted or blocked by trees and foliage especially after rain. This creates a problem for tree lined streets where residents may have to decide which is more important to them. Having a pleasant green environment or being able to download movies in seconds. Will the Hobart city council have to start removing offending trees in order to have its future smart city?  

The problem of trees has not escaped Telstra’s notice. To quote:

“Telstra is also funding research into whether uniquely Australian obstacles - including flora - will disrupt 5G signals, which occupy a higher frequency and don't travel as far as other mobile signals. "Something that seems to be unique to Australia, and we found with earlier standards, is how gumtrees impact those radio signals and the way they get from the radio tower to the end user, Mr Wright said.”

**No mention** was made of the many concerns by scientists on the possible adverse biological effects on millimeter waves. Consider:

In a recent scientific conference by the Australian Radiation Protection and Nuclear Safety Agency two expert presentations gave reason to pause in the rapid roll out of 5G millimetre waves. The first was by Dr. Dariusz Leszczynski, adjunct professor of biochemistry, University of Helsinki, Finland and chief editor of Frontiers in Radiation & Health, Lausanne, Switzerland. In his presentation, titled: 5G Millimetre-Waves Health & Environment, Leszczynski examined the serious limitations of biomedical research on millimetre waves but from what studies that are available, it should cause great concern. He specifically called for

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3 [https://www.thesun.co.uk/news/5838497/5g-phone-system-reception-problems-trees/](https://www.thesun.co.uk/news/5838497/5g-phone-system-reception-problems-trees/)

4 [https://www.youtube.com/watch?v=5S-KPQ3TDxs](https://www.youtube.com/watch?v=5S-KPQ3TDxs)

5 [https://www.youtube.com/watch?v=03QPqz_LkX0](https://www.youtube.com/watch?v=03QPqz_LkX0)

the urgent need for research on 5G millimetre waves because of the rapidly ongoing deployment of 5G technology.\textsuperscript{7, 8, 9}

Another presentation was by Dr. Andrew Wood, School of Health Sciences, Swinburne University of Technology, Melbourne. Titled, “What is the current status of research on mm-Wave frequencies”, Wood summarised his presentation (in part) as thus:

* Skin and eyes are regions of concern in regard to 5G frequencies (6-60 GHZ) and beyond
* Could be resonant enhancement absorption due to skin structures.\textsuperscript{10}

These concerns are reflected in a published review paper: Towards 5G communication systems: Are there health implications? by Dr. Agostino Di Ciaula, from the Division of Internal Medicine, Hospital of Bicceglie (ASL BAT), Bicceglie, Italy, and member of the International Society of Doctors for Environment (ISDE), Arezzo, Italy. Abstract:

The spread of radiofrequency electromagnetic fields (RF-EMF) is rising and health effects are still under investigation. RF-EMF promote oxidative stress, a condition involved in cancer onset, in several acute and chronic diseases and in vascular homeostasis. Although some evidences are still controversial, the WHO IARC classified RF-EMF as “possible carcinogenic to humans”, and more recent studies suggested reproductive, metabolic and neurologic effects of RF-EMF, which are also able to alter bacterial antibiotic resistance. In this evolving scenario, although the biological effects of 5G communication systems are very scarcely investigated, an international action plan for the development of 5G networks has started, with a forthcoming increment in devices and density of small cells, and with the future use of millimeter waves (MMW). Preliminary observations showed that MMW increase skin temperature, alter gene expression, promote cellular proliferation and synthesis of proteins linked with oxidative stress, inflammatory and metabolic processes, could generate ocular

\textsuperscript{7} https://betweenrockandhardplace.files.wordpress.com/2018/05/leszczynski-emerg-at-arpansa-may-8-2018.jpg
\textsuperscript{8} https://betweenrockandhardplace.files.wordpress.com/2018/05/leszczynski-5g-mmw-at-aocrp5-may-22-2018.jpg
\textsuperscript{10} https://betweenrockandhardplace.files.wordpress.com/2018/06/emerg_may18_wood_wide_nopics.pptx
damages, affect neuro-muscular dynamics. Further studies are needed to better and independently explore the health effects of RF-EMF in general and of MMW in particular. However, available findings seem sufficient to demonstrate the existence of biomedical effects, to invoke the precautionary principle, to define exposed subjects as potentially vulnerable and to revise existing limits. An adequate knowledge of pathophysiological mechanisms linking RF-EMF exposure to health risk should also be useful in the current clinical practice, in particular in consideration of evidences pointing to extrinsic factors as heavy contributors to cancer risk and to the progressive epidemiological growth of noncommunicable diseases.\textsuperscript{11}

Another analysis of potential 5G biological effects has been written by Dr. Martin Pall, Professor Emeritus of Biochemistry and Basic Medical Sciences, Washington State University, Portland Oregon, USA. Titled: 5G: Great risk for EU, U.S. and International Health! Compelling Evidence for Eight Distinct Types of Great Harm Caused by Electromagnetic Field (EMF) Exposures and the Mechanism that Causes Them.\textsuperscript{12}

Conclusion:

So, what are the Hobart city councillors to make of all this? Are they even aware of the scientific concerns? What will their Telstra advisors say in regard to these concerns when they speak at the next public forum on 29 August? Is it all just the worries of uninformed academic Luddites afraid of new technology? - Or is it very valid scientific concerns that are being ignored by hired experts promoting a new and inadequately researched technology?

An unfortunate scenario is now being played out throughout Australia. Local governments, understandably wishing to keep abreast of technological innovations, are hiring pro-industry experts to inform them of the facts. Is it really smart that they are turning to expert advisors who are promoting the technology and ignoring inconvenient evidence because it is a risk for their favoured industry?

Doesn’t look like a very smart city strategy to me….

\textsuperscript{11} http://peaceinspace.blogs.com/files/5g-emf-hazards--dr-martin-l-pall--eu-emf2018-6-11us3.pdf
ORSAA commentary on a recent Guardian article

ORSAA has written a letter to the Guardian in response to a recent article titled “Modern myths about cancer – from ‘chemicals’ in food to wifi” by Naomi Elster published on Mon 20 Aug 2018 in the Australian Edition of the Guardian. Refer to attached letter.