Parliamentary Inquiry into 5G in Australia

My Skills

I am presently a private citizen between jobs. I have decades of experience in IT Computer and technology Consulting and personally knew some of the members of the Australian inventors of WiFi back in the 1990's. I was able to use some of the original WiFi antenna technology they built to test and build wireless networks across western Sydney for companies spread across large estates.

I have built computer networks, computer systems and computer programs to customer specifications. I've consulted and worked with a diverse set of companies from concrete asphalt corporation to one of the largest liquor distributors in Australia to marketing/publishing companies to Cardiac and Cancer research institutes and everything in between.

In high school I studied biology as I found the mystery of life a fascinating topic to study. I find it strange that these experiences would converge and be useful to express my concern for this new, untested technology.

Introduction

5G is not a suitable technology to be installed nor implemented in Australia. It is short range, requires a high amount of energy, does not provide additional bandwidth throughput needed to increase mobile market use cases, untested and a security risk to health and safety. There is a growing list of countries all across the world who are banning this technology and due to the high absorption rate of the radio waves it emits means many times more antennas will need to be installed thus poses a risk to the electricity network as it will require more coal fire power plants to come online to satisfy the electrical requirements of this technology.

5G was invented in Israel. The original designated purpose was to increase bandwidth past 4G but that was changed to instead be a low latency technology. Once years of research and development was complete, the Israeli government immediately banned this technology locally to prevent its use where it was originally created. To a reasonable man this would be seen as a completely odd thing to do: why would a country spend so much time and resources into creating yet another mobile data technology standard to just ban it?

For the record, Israel has also banned 4G technology. The only technology they trust for their businesses and citizens to use, the only mobile data technology they have determined is safe, is 3G.

4G was standardised in 2009 and 3G was standardised in 1998. Why would Israel, who calls itself the most advanced country in the world, decide it is not ready for modern technology and would rather stick with slow high congested, high latency mobile phone technology which is now 21 years old? This issue is very perplexing to the IT industry as we thought Israel would embrace new ideas especially the ones they, themselves, invented.

Limited Distance Problem

The telecommunication industry, for 30 years, has been proud to say their technology works over long distances and provides coverage in most situations. From 3G to 4G the range has roughly been the same. But with 5G the range is cut to a fraction of the range due to the unique and previously

disregarded millimetre wavelength spectrum. 3G and 4G use a larger, wider wave length, closer to FM radio wave length, thus allowing their signals to travel further distances and allowing the coverage we all enjoy and have come accustomed to.

5G, however, with its millimetre wave length, limits the distance the radio-waves can travel. In America with their roll-out of 5G they are forced to install antennas every 20 meters to 100 meters to sufficiently cover the population.

The reason why the short distance is needed is because the 5G uses the untested millimetre radio waves energy technology. This is using the same energy band that water vapour and oxygen reside in, which is approximately 60 GHz, and so that 5G energy is quickly absorbed by the environment.

Home WiFi send radio waves at the frequency of water, so you can literally put a glass of water next to a wireless laptop or tablet and it will absorb all the energy and prevent you from connecting to your wireless network. The industry has known about energy absorption problems of WiFi and radio waves for at least 20 years that I know of personally, but this known fact goes back to even before WW2. We've known that when it rains WiFi internet networks stop working due to the above problem.

The absorption problem experienced so far in deploying 5G has been reported as being so bad across the world that the mobile phone companies deploying 5G have started demanded local councils and governments to cut down streets worth of trees to restore the range of their 5G antennas or they will be forced to install antennas every 10 meters.

I thought we were living in a time where we all agreed that cutting down trees was a bad thing, but when it comes to these pedlars of 5G, cutting down a forest to gain an extra yard does not stand in the way of good stewardship of the environment.

The human body is also mostly made up of oxygen and water, so our bodies are perfect sinks to absorb all the 5G radio-wave energy. This energy is vibrating so fast that it can literally damage DNA. As far as I have found there has been no long term studies on the effects of any form of millimetre wave technology on any organic organisms.

Instead, just like the tobacco industry, the pushers of this untested 5G technology are forming AstroTurf organisations to gas light the public into believing the technology they banned in their own home country is actually safe for every other country in the world. They also actively deny and deceive and do not want anyone to look closely at what this technology really can do.

The latency marketing tick mark is a red herring. The high absorption rate has resulted in the mandatory requirement that the antennas be placed closer to the customer's mobile handset that has the side effect of having "low latency" due to this small distance between the customer's device and the radio tower. The same effect can be achieved by 4G if the antennas are deployed each 100 meters, just like 5G, which it needs just to operate will achieve the same results. So that argument is just marketing spin.

In addition, 3G and 4G, because they cover up to 10km distance, those long form radio waves travel at the speed of light, the extra 9900 meters results in the higher latency due to their standard deployment. The beauty of this design is in high congested areas additional towers can be installed to provide extra bandwidth to the customers in that area, so a final deployment might look like Sydney CBD with antennas every 1km to provide the coverage needed to meet demand.

Creating networks like this doesn't make much of a difference for computer programmers who write software to use as its these networks are already very, very fast. What programmers want is higher throughput, but tests conducted thus far suggest 5G is slower than 4G in most use cases, which is be a negative to the current generation of customers who like the high speed connections they've had for 10 years now with 4G.

Where 5G fails catastrophically is when the customer's device is outside the 100 meter range of the antennas. Where 3G and 4G have a 10KM range, when you're out of range with 5G you're out of range of the mobile network. As Australia is roughly 7,692,024 square kilometres, to place an antenna each 100 meters means we need millions of antennas all within range of each other to create a mesh network connecting the antennas to the mobile network. If we need to install the antennas every 40 meters, like in some American towns, the number of 5G antennas would, in itself, be a significant health hazard for biological life in the vicinity of such a network but would provide faster access to the internet but not as fast as 4G.

That the actual real life speeds of 5G is slower and the network requires many, many times more antennas and transmitters to create the network, the customer will experience frequent drop outs and that, in turn, will impact the revenue of mobile application providers. As a computer consultant who has built and audited wireless networks, this technology approach is an absolute joke.

Environment and Health Hazard

This has already proven to be a biological hazard. In the Netherlands, this time last year, there was a small scale test of 5G deployed to see how the service would fair. During the trial hundreds of birds spontaneously went into cardiac arrest and died when they flew over the trial zone. This is not natural nor normal.
Source: https://www.jamesrobertdeal.org/5g-kills-hundreds-of-birds-in-netherlands/

This comes back to a key criticism everyone has with the 5G design and roll out presently underway: where are the independent studies proving it is a safe technology? The studies which most people have seen say the same thing: this technology is immature and millimetre waves are a health risk.

Independent businessmen who have been in the industry longer than I have are raising the concerns and demanding due diligence be conducted on this technology: to fund the independent studies which are vital to discover why so many birds died for no reason as well as what looks like links between many diseases that have suddenly appeared in the last 30 years which require further investigation.

Former President of Microsoft, Canada, Frank Clegg has established a non-profit charity to increase awareness of the pressure points of 5G which unsettle him enough to come out of retirement and reenter the spotlight. He has noticed an increase in A worrying presentation of his concerns can be found by this link: https://www.youtube.com/watch?v=DIV39-KOzh0

A worrying note from what Frank and I have seen thus far is we are probably heading towards a big tobacco scenario where even the existing wireless technologies may be seen as a health hazard which we can use to sue political parties, technology companies and mobile telephone companies for causing health problems they knew about decades ago. I have already lost 1 friend from a suspicious brain tumour and he used to be on the phone for hours each day for several decades until he began showing symptoms of what later took his life.

The radio waves can be mitigated by people wearing clothes made out of tin foil. I find it comical that the “Future” movies where people were wearing tin foil clothing was because they were living in a 5G world and not because it was fashion. If one of the hidden “benefits” of using this technology is to control crowds of people then they’re being dishonest as protesters will be able to mitigating this technology with a roll of tin foil. The question we have, however, is should all Australians wear tin foil all the time?

Increased Power Use and Cost of Living

As we will need to install millions of these antennas, assuming the birds in Australia are immune to the millimetre radio waves and do not die of cardiac arrest like the small scale test in the Netherlands, the next hurdle is how we power such a network. As we will need to install many, many times more antennas and transmitters all over Australia, the amount of power required out of the power grid would substantially increase.

As we will need to install millions of new antennas every 100 meters or less to create the desired wireless network, those antennas and transmitters will use additional electricity. It could potentially use more electricity than we have available at present.

Present there is a push from the UN towards intermediate power generation sources solar and wind turbines with lithium ion battery backup and decommission all base-load power generation such as coal, gas and hydro. Right now zero electricity is generated between 1am and 4am as the sun is the furthest away from these intermediate power generation sources. Man kind have not build enough batteries to power Germany for more than an hour, and the current trend will result in blackouts and the need to use localised diesel generators to keep mission critical infrastructure, such as hospitals and computer data centres running.

The amount of electricity needed to be continually pumped out into the environment, which the environment will immediately absorb, with the present government pushed electricity policy mandated to it by the UN will make electricity scarce like water will pose a significant threat to the ability for modern conveniences and increase the cost of electricity and living expenses for all Australians.

Presently 10X more Australians die from lack of heating in the winter than die of heat related deaths. Right now the cost of electricity is so high that pensioners chose to turn off their air conditioners to save electricity in this ever cooling planet and that increases the chance of more cold related deaths each year.

Even though Australia has spent hundreds of billions of dollars to prove CO2 creates heat out of nothing even though we are exiting a solar maximum period of time and spend as much to mitigate the creation of this natural plant fertilising greenhouse gas greenhouse farmers pump into their greenhouses to make their crops grow faster and with less water. With the monumental increased number of antennas and transmitters the end result will be the requirement to build more electricity resources to create the 5G telecommunication network: the cost of electricity will sky rocket and may even create a situation where we have to decide if we want to run hospitals or have partial 5G coverage.

The current intermediate power generation sources we use are tuned to use the amount of energy outputted by the solar maximum we have been since 1980 until now. At the start of 2019, until just recently, we had over 200 sun spot free days, signifying a significant drop in nuclear energy output by the sun. This has happened in the past with well documented events such as the Little Ice Age that was reported as happening all across the globe and has spawned the standard solar models

which have accurately predicted the climate on planet Earth for over 300 years. The present predictions is that the energy output of the sun will drop to less than half and may start a new iceage. The end result will be that if you have a 100 watt solar panel we should soon expect it to operate at half of its maximum efficiency. Because less solar energy is hitting the earth there should be less wind for wind turbines to convert into electricity.

The decommissioning of base-load power generation and the sun entering its solar minimum phase for the next 10 to 150 years will result in sky rocketing energy costs but will also result in increased share dividends yields for a small number of Australians and foreign investors while the Australian public are left in the lurch, unable to afford modern conveniences especially now that the solar maximum is over and we are headed into another mini-iceage. Somehow I don't think any Australian will stand for such short sighted polices in this harsh, arid land.

Conclusion

This generation of technology is untested, rushed and ill-suited for Australia. The designers of this technology immediately banned it in their home own country out of fear of what harm it will do even though they say they are the home of the future.

The size of Australia is not suited for this technology. 5G seems like it was designed for small countries like Israel. If it was installed in Israel, the home of 5G, then this system would make sense as Israel is a very small country. But Australia is a giant continent that is many thousands of times larger than Israel. The amount of infrastructure required to build and power this network will never be completed as there will be a 6G technology available long before the last 5G antenna is installed and it would need to be torn down.

There is also the problem of health hazards. We do not know what happens with millimetre wave technology. Already trials have shown it kills birds like an invisible death ray. This, in itself, should give pause for contemplation of banning the technology from use until all the kinks are identified and rectified.

I am a big believer in technology: I believe and have it seen solve many of the world's problems with correct use. But sometimes greedy blind "businessmen" come along and push something which sounds good but turns out to be literal cancer. In the past such "businessmen" pushed inventions such as using radium in all products from razor blades to tooth paste so the customer can have a "glowing smile" to Asbestos to lead in petrol. The history of the world is full of well intentioned ideas that ultimately turn out to cause nothing but harm to the public. In those examples we didn't have the knowledge that of the products inventors immediately banning its use in their own home country. Just imagine if America immediately banned lead petrol the moment before they began selling petrol. Them exercising the precautionary principal yet we are not troubles me greatly.

The Precautionary Principal should be applied to this technology. There are too many concerns and unresearched angles that require further investigation before this technology should be given the green light in Australia. Please consider the evidence and statements, above, and ban this 5G before we make a giant mistake.