



SAFER (EMR) TECHNOLOGY
Aotearoa – New Zealand



STANZ WIRED - Newsletter

#12 Summer 2023-2024

Kia ora & Welcome

It has been a while since the last STANZ newsletter, but the committee has been steadily making progress. Amongst other things the STANZ website has been upgraded to be more user-friendly and our AGM was held in late July. The AGM had a great turn out of members from around the country facilitated by Zoom video and the existing committee members were voted back in. One of our newest members Alexei has been doing great work as part of his academic research with a summary and analysis of official compliance measurements done in NZ which shows that EMR levels around cell towers are increasing over time (link below).

There are new groups organising around the topic of safer EMF technology and one of these based in Auckland has their own new website: <https://safertech-nz.webflow.io/>
The STANZ committee is committed to networking with these new groups in the new year to progress work on achieving our common aims. One of the positive policies of the new government is their commitment to ban the use of cell phones by students during school time which will only have beneficial social and educational outcomes. As a movement we need to keep educating the public and politicians on the need for safer use of this type of technology.

Latest STANZ Website News Articles

Don't forget to check out the new STANZ website as it has a new website address to better reflect our organisation: <https://saferemrtechnology.org.nz/>

There is a wealth of up-to-date material on it to help keep us all informed of the most important happenings in this rapidly developing field of technology:

- [EMR Measurements in NZ](#)
- [Electromagnetic fields disrupt the pollination service by honeybees](#)
- [Tim Hunt Presents Evidence to Whangarei District Council Which Suggests Emissions from Local Cellphone Tower Are Harmful, Nov 23, 2023](#)
- [Effects of Unregulated Digitalization on Health and Democracy](#)

EMF Q & A

"I'm wanting to replace my fridge and find most brands are 'smart' compatible. It's getting hard to find household electrical appliances like TV's and fridges that don't offer a wireless connection function. We are a household that uses ethernet cable rather than Wi-Fi for internet access and strives to maintain a low emf environment. If there is no Wi-Fi router

operating in our house will the Zigbee device in our new fridge still send out radio frequency signals? If so, is there a way to disconnect the Zigbee device from the appliance or disengage the signal? What type of technicians are required for this task?"

Typically with WiFi enabled appliances and devices, when a WiFi signal is not present, the appliance will continue to search for the signal. In many cases, a searching device will broadcast a stronger signal than when connected. This is part of the design as during the connection process, a device will compensate based on how strong the signal is it is trying to connect too.

Fridges like washing machines and other home appliances that use Zigbee or other wireless protocols for connecting to the 'Internet Of things' (IOT), unfortunately can not be disabled, based on what we know to date but open to understanding more about peoples experiences as not all fridges are the same. While a washing machine can be turned off at the wall thus eliminating a WiFi, Zigbee or mesh signal, you can expect a fridge will continue to broadcast because it's under power all the time.

Zigbee is designed to be a separate network to a home WiFi, and to work fully it requires a hub/router to coordinate all the home network. When an appliance or end device has Zigbee, its only role is to send data to the hub which doesn't need to happen continuously and so will spend most of its time in a sleep state. Zigbee uses lower power than Bluetooth and only sends small packets of data periodically and requires other compatible devices to help 'hop' the signal any distance. So signal strength should be low.

What we are finding in these smart appliances is that there is generally no software functionality that allows control over disabling any wireless transmitters. Physical intervention and disassembly to find the offending transmitter may invalidate warranties and other agreements.

The best solution here is to measure the RF from the fridge up close to locate the area the transmitter may be in (this may be able to be shielded), then measure in different areas of the house to see if that broadcast signal reaches the lounge and sleeping areas.

Author: Andy Hooley

www.earthwaves.co.nz

www.emfshop.co.nz