



STOP SMART METERS AUSTRALIA INC

Reg. No. A0059190N ABN 14 717 028 504

14 May 2017

Communications Alliance Ltd
PO Box 444, Milsons Point NSW 1565
Submitted as an attachment

Dear Sir/Madam

Mobile Phone Base Station Deployment Industry Code (C564:2011)

Thank you for the opportunity to comment on the above Code.

Stop Smart Meters Australia (SSMA) is a volunteer-based consumer advocacy group which incorporated as an Association in April 2013 in response to widespread community objection to the Victorian State Government mandated Advanced Metering Infrastructure (AMI) rollout. Paramount within our legal purposes is to provide support and assistance to Australians who are opposed to smart meters on the grounds of health; a significant portion of this cohort are sensitive to pulsed radiofrequency electromagnetic fields and, in consequence, are unable to tolerate exposure to emissions from mobile phone radiocommunications infrastructure.

The Australian communications industry has a duty of care to ensure that radiocommunication emissions from mobile phone base stations do not harm the health of the population and environment

A number of our members and website followers have had their health adversely impacted as a result of increasing levels of man-made electromagnetic fields (EMF). Anthropogenic microwave radiation, from a variety of sources, has increased natural background levels *one million billion times – or more –* in recent years (Johansson 2013, p. 7).

One of the key outcomes of the rollout of wireless smart meters, which emit pulsed radiofrequencies in the microwave range, has been an increase in the prevalence of people identifying as being electrically hypersensitive (EHS). According to the data analysed by Lamech (2014, p. 31) in *Self-Reporting of Symptom Development From Exposure to Radiofrequency Fields of Wireless Smart Meters in Victoria, Australia: A Case Series*, only 8% of this cohort considered themselves to be suffering from EHS prior to exposure to smart meters. Victorians who already had the condition prior to the rollout have also reported a worsening in their sensitivities. This has resulted in people suffering debilitating symptoms,

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not only when in the proximity of smart meters, but also when exposed to radiofrequencies from other sources, such as mobile phone and fixed wireless base stations.

In some cases the impact on people's health has been profound, resulting in high personal costs for these people and their families. In addition to the loss of health that EHS sufferers experience to varying degrees, the condition also leads to a need to minimise exposure to wireless emissions. This has forced a number of people to leave their homes and seek out low-EMF rural areas to live in.

Estimations of the prevalence of EHS vary. A 2008 research article, based on a statistical Austrian cross-sample in regard to age, gender and Federal State, showed a prevalence rate of 3.5% (Schröttner and Leitgeb). UK-based *EM Radiation Research Trust* state that it is currently estimated that between 2.5% and 8% of the population could have this condition (EM Radiation Research Trust 2017). Research conducted by Hallberg, an independent researcher, and Oberfeld, a medical doctor from the Austrian Department of Public Health, had previously indicated that up to 50% of the population will be electrically sensitive in the near future (Hallberg & Oberfeld 2006).

The World Health Organization's fact sheet on electromagnetic hypersensitivity states that "While some individuals report mild symptoms and react by avoiding the fields as best they can, others are so severely affected that they cease work and change their entire lifestyle" (World Health Organization 2005). According to the WHO, the symptoms most commonly experienced include "dermatological symptoms (redness, tingling, and burning sensations) as well as neurasthenic and vegetative symptoms (fatigue, tiredness, concentration difficulties, dizziness, nausea, heart palpitations, and digestive disturbances)."

In addition to the escalating number of Australians becoming EHS, exposure to radiofrequencies from sources such as mobile phone and fixed wireless base stations may have serious long-term consequences for both humans and the environment

The World Health Organization in 2011 classified radiofrequency electromagnetic fields as being a Group 2B carcinogen, that is, as being possibly carcinogenic to humans. Emissions from mobile phone and fixed wireless base stations fall into this classification. It appears likely that this ranking will be upgraded to a probable carcinogen (Group 2A), given mounting evidence from scientific studies. Further scientific studies have shown that this classification should now be increased to that of a probable human carcinogen (Morgan et al. 2015).

Health studies, such as that carried out in Spain in the vicinity of two mobile phone towers, show statistically significant positive exposure-response associations with outcomes including headaches, nausea, sleeping disorders, visual disorder and cardiovascular problems (Oberfeld et al. 2004).

Other scientific studies show that adverse outcomes as a result of exposure to radiofrequency radiation include DNA single strand and double strand breaks, breaching of the blood-brain barrier and increased production of heat-shock proteins (Maret 2012, p. 19). This may lead to an initiation of cancer or mutations that carry down generations (Johansson 2011). A review, entitled *Long-term exposure to microwave radiation provokes cancer growth: evidences from radars and mobile communications systems*, points out that although the carcinogenic effect of microwave radiation is typically manifested after long-term exposure, even a year of operation of a powerful mobile phone base station resulted in a dramatic increase in cancer incidence among the nearby population (Yakymenko et al. 2011, p. 1). These effects are a result of non-thermal levels of irradiation, and therefore are outside the scope of the protection intended by compliance with the radiofrequency standard set by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

SSMA wishes to direct the Communications Alliance to an international appeal from scientists addressed to the Secretary-General of the United Nations and the Director-General of the World Health Organization which, in the face of increasing evidence of risk, calls for more protective exposure guidelines for radiofrequencies.

"Numerous recent scientific publications have shown that EMF affects living organisms at levels well below most international and national guidelines. Effects include increased cancer risk, cellular stress, increase in harmful free radicals, genetic damages, structural and functional changes of the reproductive system, learning and memory deficits, neurological disorders, and negative impacts on general well-being in humans. Damage goes well beyond the human race, as there is growing evidence of harmful effects to both plant and animal life" (International EMF Scientist Appeal 2016).

SSMA considers it imperative that the Communications Alliance factors into its review of the Code the health and environmental implications inherent in the rollout of technology which is underpinned by the emission of radiofrequency pollutants.

Communications Alliance cannot rely on ARPANSA's risk assessment

ARPANSA's standard for radiofrequency exposure does not provide a high level of protection when compared with some of the other guidelines and standards in place elsewhere in the world. Forty percent of the world's population live in jurisdictions with significantly lower limits. Radiofrequency exposure limits in place in these jurisdictions are ten to hundreds (and even thousands) of times more rigorous than ARPANSA's standard, which is based on the International Commission on Non-Ionizing Radiation Protection's 1998 guidelines (Jamieson 2014, p.4).

Radio quiet zones urgently needed in Australia

Mobile 'black spots' represent 'white spots', for the growing number of people who have developed EHS.

The Council of Europe's 2011 resolution on the potential dangers of electromagnetic fields recommended that all reasonable measures be taken to reduce exposure to electromagnetic fields (Council of Europe 2011). The Council also recommended that particular attention be given "to 'electrosensitive' people who suffer from a syndrome of intolerance to electromagnetic fields and introduce special measures to protect them, including the creation of wave-free areas not covered by the wireless network".

There is an urgent need in Australia to establish radio quiet zones (also referred to as 'white zones') to accommodate the needs of people with EHS.

Recommendations

- All Australians should have the right to control the levels of EMF which they are exposed to in their own homes and therefore should be entitled to influence the placement of radiocommunications infrastructure which will affect them.
- Community sensitive locations (for example, hospitals, schools and aged care centres) should be subject to special consideration and a precautionary approach.
- Radio quiet zones ('white zones') need to be established.

As the situation stands today in Australia, the community and local councils are being denied the opportunity to meaningfully participate in mobile phone base station site selection. Community consultation has proven to be a sham.

Although the existing Code provides for the public and local councils to submit comment, the reality is that this is a futile and time wasting exercise for all parties as it does not result in substantive change to outcomes.

SSMA considers that this situation needs to be urgently rectified.

Yours sincerely



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