



STOP SMART METERS AUSTRALIA INC

Reg. No. A0059190N ABN 14 717 028 504

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The Executive Director
Australian Law Reform Commission
GPO Box 3708
Sydney NSW 2001
By email: freedoms@alrc.gov.au

Dear Sir/Madam

Thank you for the opportunity to submit comment on the draft document *Traditional Rights and Freedoms— Encroachments by Commonwealth Laws* Issues Paper.

Stop Smart Meters Australia (SSMA) is a volunteer-based advocacy group which was formed in consequence of widespread community concern surrounding the deployment of wireless smart meters. Lack of responsible legislation regulating radiofrequency emission levels from devices such as smart meters has resulted in the erosion of a variety of traditional rights, freedoms and privileges.

The specific rights which we have addressed, in response to the ALRC's questions, are as follows:

5. Freedom of Movement

Question 5–1 What general principles or criteria should be applied to help determine whether a law that interferes with freedom of movement is justified?

SSMA believes that this question, in relation to our own advocacy concerns, needs to be broken down into two components.

Firstly: Does this law have the consequence, intended or otherwise, of interfering with freedom of movement?

If the answer is yes, then secondly: Is this consequence justified?

Question 5–2 Which Commonwealth laws unjustifiably interfere with freedom of movement, and why are these laws unjustified?

In our estimation, the *Radiocommunications (Electromagnetic Radiation — Human Exposure) Standard 2014* interferes with freedom of movement. This appears to be an unintentional (but none the less serious) outcome.

The *Radiocommunications Act 1992* s 162 (1) (b) states that the Australian Communications and Media Authority (ACMA) may make standards for the maximum permitted level of radio emissions from devices. These standards, in regards to SSMA's advocacy concerns, are to consist 'only of such requirements as are necessary or convenient' for 'protecting the health or safety of persons who are reasonably likely to be affected by the operation of radiocommunications transmitters or radiocommunications receivers.'

The *Radiocommunications (Electromagnetic Radiation — Human Exposure) Standard 2014* is an instrument which is the outcome of the *Radiocommunications Act 1992*. The Act does not state that the provision of such protection is the exclusive domain of the ACMA. However, **this instrument has come to be considered by Federal and State agencies to be the means by which the public's health is protected from electromagnetic energy from transmitters.**

In itself the legislation is not the problem. The crux of the problem is that this instrument is viewed by other agencies as being the definitive and sole means by which the Australian public is assured of not being exposed to excessive microwave radiation from devices (such as smart meters).

The instrument, by its very nature, is not capable of providing this degree of protection. Nor, apparently, did the ACMA ever intend for this piece of legislation to assume such exclusive importance in relation to this function. Rather, it appears that the instrument has been constructed to serve the ACMA's purpose of providing a streamlined means of assessing the compliance of devices with emission limits.

The following quotes demonstrate how other agencies view the effect of this instrument.

Victoria's former Health Minister, Minister Davis, advised SSMA on 24 August 2014 that:

'The regulation of health and safety from radiofrequency emissions in the communications sector rests with the Commonwealth's Australian Communications and Media Authority (ACMA). The Commonwealth via the Radiocommunications Act 1992 has reserved such responsibility to itself and the ACMA regulates the health and safety of radiocommunication devices, including smart meters, mobiles phones and baby monitors by prescribing radiofrequency standards that it has determined are protective of health.'

The Hon. Russell Northe MP, former Victorian Minister for Energy and Resources, stated, in a reply to SSMA dated 18th June 2014:

'The Australian Communication and Media Authority (ACMA) are responsible for regulating the exposure standards that are designed to protect against all known adverse health

effects. Should you have concerns with regard to the use of the ARPANSA standard, you should direct your queries to ACMA.'

In another instance, Energy Safe Victoria's report of 31st July 2012, on the *Safety of Advanced Metering Infrastructure in Victoria*, states:

'The potential health effects of smart meters – this is the subject of separate regulatory arrangements administered by Australian Communications & Media Authority (ACMA), which incorporates exposure limits developed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)'

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) states in its *EME Series No. 1 Fact Sheet* (August 2014 revision):

'The Australian Communications and Media Authority (ACMA) has the regulatory responsibility to protect the health and safety of persons exposed to RF EME from radiocommunications transmitters. In order to fulfil this regulatory responsibility ACMA has adopted the ARPANSA limits into the Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 2014 and the licence conditions for radiocommunications transmitters.'

The instrument itself states that the object of the standard is to regulate *'the performance of particular radiocommunications transmitters to protect the health and safety of persons who may be exposed to electromagnetic radiation from such transmitters.'* This claim may provide some explanation as to why other agencies have been inclined to abrogate their own duty of care that Australians do not suffer adverse health effects as a result of the deployment of devices such as wireless smart meters, which emit microwave radiation.

However, the CEO of the ACMA, Mr Chris Chapman, has a different perspective on the ACMA's role.

In a letter to SSMA dated 1st October 2014, Mr Chapman states:

*'I can confirm that the ACMA's role in relation to EME focuses **solely** on the operation and performance of radiocommunications transmitters.'*

The ACMA also explained its position in its 2014 response to comments received on the remaking of the *Radiocommunications (Electromagnetic Radiation — Human Exposure) Standard*, stating that the ACMA instruments *'regulate the technical performance and operation of equipment, **not the use of equipment by consumers or other organisations'*** (ACMA 2014...emphasis added).

Federal and State Government confusion over whose responsibility it is to protect the public from microwave radiation in consequence of the rapid rollout of wireless technology, and

the resulting unprecedented escalation in man-made electro-pollution, is an increasingly urgent problem.

The reliance by State and Federal Government agencies on this instrument to provide for health and safety in relation to radiofrequency emissions has led to serious interference with various common law rights, including the right of freedom of movement. The reasons for this are twofold.

Firstly, the ACMA has chosen to adopt a diluted version of the ARPANSA radiofrequency standard, as the ACMA has not incorporated the precautionary clauses contained in ARPANSA's standard within its own standard. (ARPANSA's standard, *Maximum Exposure Levels to Radiofrequency Fields — 3 kHz to 300 GHz*, is a document which is the outcome of the requirements of the *Australian Radiation Protection and Nuclear Safety Act 1998*).

The ACMA stated, in its response to comments received on the remaking of the *Radiocommunications (Electromagnetic Radiation — Human Exposure) Standard*, that *'Referring to, or including, the entire ARPANSA Standard in the Human Exposure Standard is not appropriate. Many clauses, including those which apply to behavioural matters associated with EME exposure in a given situation, are not appropriate for inclusion in equipment supply arrangements'* (ACMA 2014).

However, arguably, Victorian power distributors would have chosen safer technology for the deployment of smart meters, had they been obligated to consider precautionary aspects of ARPANSA's standard, such as the requirements of Clause 5.7 (e).

Secondly, a very large body of scientific studies has demonstrated that the limits set within ARPANSA's standard fail to provide adequate protection for the public.

Australia's radiofrequency standard for non ionising radiation is aimed at guarding against gross thermal effects resulting from an increase in the temperature of body tissue. It does not provide protection against the many, and varied biological effects – as shown in thousands of studies – which occur at levels that can be significantly below the limits set by the standard.

For instance, although Victorian emissions from wireless smart meters have been shown to be well within the radiofrequency (RF) limits outlined in ARPANSA's standard, this needs to be viewed in the context of limits set elsewhere in the world. Forty percent of the world's population has the benefit of higher levels of protection. Radiofrequency exposure guidelines in place in these jurisdictions are *ten to thousands of times* more rigorous than the ARPANSA standard, which is based on 1998 ICNIRP guidelines (Jamieson 2014).

As a result of the ACMA's adoption of ARPANSA's standard, and other agencies' reliance on the ACMA as the exclusive provider of regulatory oversight, Australians are left in the

anomalous situation of being protected by a radiofrequency standard which falls short of world best-practice guidelines, and is exacerbated by the fact of the ACMA only having adopted those portions of ARPANSA's radiofrequency standard suited to its own purposes.

Freedom of movement lost as a result of RF irradiation of the public

The State-government mandated deployment of wireless smart meters in Victoria, and the consequent increase in mass exposure of the public to pulsed microwave emissions from smart meters, appears to have caused many people to have reached a 'tipping point' in terms of their ability to tolerate man-made radiation.

A report prepared by Dr Namkung, of the Health Services Agency of the County of Santa Cruz, explains it in the following terms: *'Additionally, exposure is additive and consumers may have already increased their exposures to radiofrequency radiation in the home through the voluntary use of wireless devices such as cell and cordless phones, personal digital assistants (PDAs), routers for internet access, home security systems, wireless baby surveillance (baby monitors) and other emerging devices. It would be impossible to know how close a consumer might be to their limit, making safety an uncertainty with the installation of a mandatory SmartMeter'* (Namkung 2012, p. 11).

SSMA has been advised of a large number of cases where people have been denied freedom of movement as a result of the deployment of smart meters, in consequence of biological reactions to the emissions. Typical of the stories that we hear is that from Michaela, a Melbourne woman, who was hospitalised three times and was forced to sell her home of 15 years in order to re-locate to a home that was subject to lower levels of radiation. She is no longer able to work as a school teacher or indeed spend time in any environment now that has wireless devices (Michaela 2012). Michaela's story is shared by an increasing number of Victorians.

Many people have spent considerable sums of money in an attempt to shield parts of their home from smart meter microwave emissions. However, this still leaves them unable to spend time in unshielded areas, such as their gardens. A number of people have ended up driving at night to areas where there is less radiation, and sleeping in their vehicle, as they are no longer able to obtain a good night's rest within their own home. There have also been cases where people have resorted to uprooting the whole family and moving to live in remote rural areas, or other parts of Australia, which haven't yet been subject to the introduction of wireless smart meters. Exposure to smart meter emissions also appears to have precipitated sensitivity to other sources of electromagnetic radiation. People have reported no longer being able to attend events, such as football games, or to go anywhere where there are large crowds, due to the large number of devices emitting microwave radiation.

A recent PubMed-listed, peer-reviewed study titled *Self-reporting of Symptom Development From Exposure to Radiofrequency Fields of Wireless Smart Meters in Victoria, Australia: A Case Series*, which examined 92 of the cases in Victoria, offers the hypothesis that 'some people can develop symptoms from exposure to the radiofrequency fields of wireless smart meters' (Lamech 2014, p. 38). The study's conclusions point to the 'possibility that smart meters may have unique characteristics that lower people's threshold for symptom development.'

Clearly, existing legislation is not protecting the public from adverse health effects incurred by exposure to increased electromagnetic radiation. Existing legislation appears to assist industry, through the enactment of simple limits for individual devices, but does not cater to the reality that the population is now being exposed, often concurrently, to multiple sources of man-made electromagnetic radiation. In the case of wireless smart meters, there is no study, anywhere in the world, which has shown that the technology is safe, and that it does not pose a long-term threat to the health of humans.

It is SSMA's strongly held opinion that denying Australians the right to freely enjoy their own homes and gardens, freely move within their own communities and work in their chosen professions due to unprecedented levels of radiofrequency emissions, is unjustified.

In this instance, the denial of rights appears to be an outcome of reliance on legislation which, in SSMA's view, was never designed to provide the degree of protection warranted in today's world. SSMA believes the need to remedy this situation is urgent. Some research, such as that performed by Hallberg, an independent researcher, and Oberfeld, a medical doctor from the Austrian Department of Public Health, has indicated that up to 50% of the population will become electrically hypersensitive in the near future (Hallberg & Oberfeld 2006).

9. Burden of Proof

Question 9–1 What general principles or criteria should be applied to help determine whether a law that reverses or shifts the burden of proof is justified?

SSMA believes that this question, in relation to our own advocacy concerns, needs to be broken down into two components.

Firstly: Does this law have the consequence, intended or otherwise, of interfering with freedom of movement?

If the answer is yes, then: Is this consequence justified?

Question 9–2 Which Commonwealth laws unjustifiably reverse or shift the burden of proof, and why are these laws unjustified?

Again, Government reliance on the *Radiocommunications (Electromagnetic Radiation — Human Exposure) Standard 2014*, an instrument which is the outcome of the *Radiocommunications Act 1992*, has led to an unjustifiable reversal and shift in the burden of proof.

As explained in our response to Question 5-2, Federal and State bodies regard adherence to this legislation as incontrovertible provision that devices are safe, whenever they comply with this instrument.

The logic of the Government, including the Victorian Department of Health and Human Services, appears to be that because the legislation is designed to regulate '*the performance of particular radiocommunications transmitters to protect the health and safety of persons who may be exposed to electromagnetic radiation from such transmitters*' then, by definition, it is impossible for anyone in Australia to have been adversely affected by emissions from devices such as wireless smart meters.

This is patently absurd logic. As discussed before, there is no general consensus amongst countries as to what constitutes a safe exposure limit. Australia's limits allow the population to be irradiated tens, and thousands, of times more than what is considered a safe exposure limit by some countries. In addition, the ACMA has failed to adopt ARPANSA's standard in full, not having included its precautionary elements.

In line with our advice to both the current and previous Victorian Government, SSMA is in receipt of in excess of 370 (unsolicited) reports alleging a variety of adverse symptoms, some life-threatening, incurred as a result of exposure to smart meters' radiofrequency emissions. This cohort is viewed as being the 'tip of the iceberg'. The majority of the population and the Australian medical fraternity (unlike in some countries) have no previous experience, nor training, in identifying biological changes resulting from increased non ionising radiation exposure. In consequence they are unlikely to link the rollout of wireless smart meter technology to the symptoms which have been triggered. The emissions from Victoria's smart meters appear to have exacerbated existing symptoms, in addition to triggering new symptoms in people who have not previously exhibited sensitivity to wireless technology.

Written evidence submitted to the UK Parliament in 2013 attested to the fact that the pulsed radiation from smart meters has resulted in thousands of health complaints world-wide. More than 10,000 health-related complaints were submitted to the *California Public Utilities Commission* alone, and included personal testimonies from medical doctors, psychotherapists and nurses regarding their own symptoms (Stop Smart Meters! 2013).

The Victorian Government's reliance on the integrity of ARPANSA's standard, which forms the basis of the ACMA's instrument, led it, in 2011, to commission a report which measured the compliance of smart meter emissions with ARPANSA's exposure limits. It was thought

the demonstration that smart meter emission levels were well within the standard would prove to the public that smart meters were safe. This exercise was again repeated last year.

Despite the Victorian Government seeing its way clear to expend public monies examining electronic meters, it has refused to investigate, or it would seem, document information on even a single person affected by smart meter emissions.

Examining emission compliance with the ACMA's standard is, to SSMA's mind, akin to undertaking a study to determine if peanuts meet Australian food safety codes. Obviously, such a study would not reveal the danger of anaphylaxis, occurring as a result of minute exposure to peanuts, as happens in certain members of the community. Similarly, seeking to establish that smart meter emissions meet ARPANSA's radiofrequency standard, fails to recognise and address this new pandemic in the making.

Typical of the response that SSMA and members of the public have received from the Government on this issue, is the following reply from Victoria's former Health Minister, Minister Davis, on 24 August 2014.

'I am advised that Smart Meters comply with the emission requirements specified and enforced by the ACMA. The ARPANSA radiofrequency standards were chosen by the ACMA as being appropriate for the protection of the Australian population from radiofrequency radiation in the communications sector. Compliance with these limits would therefore deem smart meters safe. The Victorian Department of Health does not investigate alleged cases of electromagnetic hypersensitivity.'

The Government's refusal to acknowledge or investigate the adverse health effects that a number of Victorians have experienced, following the introduction of pulsed smart meter emissions, has placed these people in an intolerable position. As the rollout in Victoria was mandated by the State Government, this means people who have been affected following the installation of a meter do not have the option of having their smart meter exchanged for a non-transmitting meter or having the smart meter switched to a 'radio-off' option (both of which are possible in many other parts of the world).

People who have been affected by nearby neighbours' smart meter emissions are also placed in a difficult position. Physicist Dr. Ronald Powell analysed wireless smart meter emissions, in light of the conclusions reached by the *BioInitiative 2012 Report*, a report compiled by 29 experts from ten countries which reviewed 1800 new scientific studies on non ionising radiation since the *BioInitiative 2007 Report* (which had, in turn, reviewed over 2,000 studies). He concluded that the power density at 100 metres from a smart meter is '*higher than the power density that triggered biological effects in 6 of the 67 studies*' which he considered. His analysis also showed that the radiofrequency power density from a smart meter does not drop down to the level of the radiofrequency exposure limits proposed by

the *BioInitiative 2012 Report* until distances of 180 to 200 metres from a smart meter are reached (Powell, 2013, p. 12).

SSMA believes it is entirely unacceptable that the burden of proof in these incidences has been shifted to the general public. It has placed Australian citizens in an extremely difficult position. The issues are also very complex in nature.

The added complication is that industry has an undoubted interest in clouding public and Government perceptions regarding safety. Not surprisingly, and in a similar vein to the prolonged cover-up of other pollutants, such as tobacco and asbestos, it has been found that industry-funded studies only have a 30% likelihood of finding adverse effects as compared to independent studies, where the likelihood is 70% (Ishisaka 2011).

The reliance which has been placed by all levels of Government on the ACMA's instrument has also led to mass governmental denial of the reality of what is occurring, and consequent lack of action in addressing the situation. This means that doctors are not being trained in how to recognise or deal with symptoms of electro hypersensitivity, such as occurs in countries such as Austria and Canada. Sufferers are being denied governmental assistance, as occurs in Sweden, where Council assistance can be obtained to implement shielding, and where low-electromagnetic radiation respite areas (as well as hospital accommodation) can be accessed. It also means that appropriate precautionary legislation is not being introduced, as occurred in France this year, where, for instance, it is now obligatory for all mobile phone advertisements to also clearly and legibly mention '*the recommended use of an accessory device that reduces exposure of the head to radio frequency radiation*' (Le Hir 2015). Wireless internet is also now prohibited in areas designated for the use of children less than three years of age and only allowed to be switched on in French elementary schools at such times as it is being used for teaching purposes.

19. Others Rights, Freedoms and Privilege

Question 19–1 Which Commonwealth laws unjustifiably encroach on other common law rights, freedoms and privileges, and why are these laws unjustified?

Health and Safety

The *Radiocommunications (Electromagnetic Radiation — Human Exposure) Standard 2014* has also led to the loss of other rights. Section 4 of the standard states that the object of the standard is to regulate '*the performance of particular radiocommunications transmitters to protect the health and safety of persons who may be exposed to electromagnetic radiation from such transmitters.*'

However, the standard excludes devices operated by certain classes of persons, these being Defence Force personnel and police.

Under Common Law, employers must take reasonable care for the health and safety of their employees. SSMA believes it is unjust to exclude Defence Force personnel and police from the safety net of this standard, thereby effectively denying these persons their common law right to have employers take reasonable care for their health and safety. SSMA believes this is particularly important considering the standard, in SSMA's opinion, only affords a marginal degree of protection.

SSMA is therefore of the firm opinion that the instrument in discussion encroaches on the common law rights of workers.

Conclusion

Lack of responsible regulatory legislation of radiofrequency emissions is an increasingly urgent oversight. The present regulatory situation in Australia is totally inadequate to deal with the rapid deployment of technology which has never been proven safe. This has led to a serious erosion of a range of traditional rights, freedoms and privileges.

It is unacceptable that agencies are looking to the ACMA to provide regulatory assurance of safety when, in the words of its own CEO, the ACMA '*does not have legislative responsibility for investigating the possible health effects of human exposure to EME and is not qualified to undertake such a role as it is not an expert body in health matters.*'

SSMA hopes that the ALRC will give serious consideration to the matters which we have raised.

Yours faithfully ,



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