STOP SMART METERS AUSTRALIA INC
Reg. No. A0059190N ABN 14 717 028 504

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The Manager
Technical Regulation Development Section
The Australian Communications and Media Authority
PO Box 13112
Law Courts
Melbourne VIC 8010
By email: eme.consultation@acma.gov.au

Dear Sir/Madam

Automatic sunsetting of legislative instruments

Thank you for the opportunity to comment on the ACMA's March 2014 consultation paper regarding the proposal to remake the *Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2003* and the *Radiocommunications (Compliance Labelling – Electromagnetic Radiation) Notice 2003* legislative instruments.

Stop Smart Meters Australia (SSMA) is a purely volunteer-based advocacy group which incorporated as an Association in April 2013 in response to the community's objections to the Victorian Advanced Metering Infrastructure rollout. Paramount within our legal purposes is to provide support and assistance to people opposed to the forced rollout of smart meters on the grounds of health, in addition to lobbying in regards to the negative aspects of smart meters.

Current legislative instruments are *not* operating effectively

SSMA believes the ACMA's proposal to remake each of the legislative instruments referred to above, without any significant changes, on the basis that each of them is operating effectively and efficiently, lacks substance.

Under the *Radiocommunications Act 1992* s 162 (1) (b) the 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 ARPANSA's RF standard does not protect Australians' health

SSMA believes that the ACMA's partial adoption in the draft *Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2014* of the ARPANSA's *Radiation*

Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3 kHz to 300 GHz fails to protect the health of Australians exposed to chronic radiofrequency emissions from smart meters and smart meter infrastructure.

The ARPANSA's standard only protects against the heating of body tissue. It fails to provide protection against adverse biological effects, such as breaches of the blood/brain barrier, selective release of calcium from cell membranes, DNA single and double strand breaks and nerve cell death, which occur for other reasons.

Physicist Dr Ronald Powell analysed smart meter emissions in light of the conclusions reached by the BioInitiative 2012 Report, which is a report compiled by 29 experts from ten countries. About 1800 new scientific studies on non-ionizing radiation since the BioInitiative 2007 Report (which had in turn had reviewed over 2,000 studies) were considered in the 1479-page BioInitiative 2012 Report. Dr Powell 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 RF power density from a smart meter does not drop down to the level of the RF exposure limits proposed by the BioInitiative 2012 Report until distances of *180 to 200 metres* from a smart meter are reached (Powell, 2013).

This substantiates anecdotal evidence which SSMA is in receipt of; Victorians are being adversely affected not only by emissions from their own smart meters but, in a growing number of cases, by emissions from neighbouring smart meters. This is despite the fact that emission levels are a fraction of the ARPANSA reference levels. SSMA recommends that, in order for the ACMA to meet its legislative responsibilities under the Act of producing a standard that protects the health of persons who are reasonably likely to be affected by the operation of radiocommunications transmitters and receivers, the ACMA replace ARPANSA RF reference levels with more realistic levels.

Only a portion of the ARPANSA RF Standard is incorporated into the *Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2014*

The fact that the ACMA has chosen to adopt only a portion of the ARPANSA RF standard has further exacerbated the possibility of perverse outcomes. For instance, clauses such as 5.7 (e) of the ARPANSA standard, which provides a precautionary aspect to the standard, have not been included in the ACMA's standard. This has resulted, under the ACMA's legislation, in there being *no* requirement for companies exposing Australians to radiocommunications transmitters and receivers to explore such alternative means of communication as would result in lower levels of population irradiation.

Similarly, clauses contained in the ARPANSA's standard which qualify maximum exposure levels, such as Clause 5.2, which reduces the exposure limits of occupationally exposed pregnant women, do not form part of the ACMA standard. Given the increasing number of scientific studies showing that the core of the ARPANSA standard is based on flawed and outdated theory, this further erosion of qualifying aspects of the ARPANSA standard is of concern to SSMA.

The *Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2014* should clearly identify which portions of the ARPANSA standard have not been adopted

SSMA recommends that the ACMA standard clearly identifies, for the public and other interested parties, which portions of the ARPANSA standard have not been adopted by the ACMA. Otherwise, the ACMA is complicit in creating a false belief that it has adopted the ARPANSA RF standard in its entirety. This belief may lull the public, other regulators and companies involved in the rollout of RF-emitting devices, into an unwarranted sense of comfort.

Similarly, if the ACMA's standard omits to state in plain English that it is only adopting a portion of the ARPANSA RF standard this also flows through to all surrounding explanatory material. For instance, the ACMA's webpage on EMR equipment compliance and labelling states that *"The limits set for safe exposure are not developed by the ACMA but by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) the expert body in the field of radiation protection and associated safety"* (ACMA 2013). This statement implies that the ACMA has adopted the ARPANSA's RF standard in its entirety.

Other regulatory bodies also appear to be under this misapprehension. For 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) ....". ESV's implied assumption that the ACMA has full responsibility for regulation of the ARPANSA standard appears to have led, in this instance, to an abrogation of its own legislative duties of ensuring the safety of electrical systems and equipment (Stop Smart Meters Australia 2012). SSMA believes that the ACMA has contributed to this situation by failing to spell out in plain English the limiting factors in its adoption of the ARPANSA standard.

Radiocommunications (Compliance Labelling – Electromagnetic Radiation) Notice 2014

SSMA recommends that all aware user and non-aware devices carry a prominently displayed label depicting both a visual RF danger image and a plain English statement indicating RF, or specifically microwaves (if this is the case), in order to alert the public to sources of RF. This importantly falls in line with the advice of overseas authorities, such as the Council of Europe's resolution on *The potential dangers of electromagnetic fields and their effect on the environment,* to provide clear labelling on devices (Council of Europe 2011). In the case of smart meter relays and access points, which are typically hosted on poles, SSMA recommends that the label is displayed at eye level on the pole.

Additionally, in line with the Council of Europe's Resolution and the 2013 expert appraisal of radiofrequencies and health by ANSES (the French Agency for Food, Environmental and Occupational Health & Safety), "devices emitting electromagnetic fields intended for use near the body (DECT telephones, tablet computers, baby monitors, etc.) should display the maximum level of exposure generated (SAR, for example)" (ANSES 2013). SSMA recommends in particular that smart meters display this information, given the close

proximity of many of these to where people pass as well as spend extended periods of time during waking and sleeping hours.

SSMA also strongly recommends that a national, publically accessible database of all the locations of smart meter relays and access points is created. Currently, there exists the anomalous situation that the location of towers is in the public domain via the Radiofrequency National Site Archive, but, as relays and access points do not fall within this ambit, power distributors refuse to divulge their location to the public. In the Victorian context, where Silver Spring Networks smart grid technology has been deployed for the mesh networks, each access point can provide communications for up to 5,000 smart meters. As a consequence there can be considerable RF activity in the vicinity of access points, bearing in mind that they also act as the focal point for the backhaul communications. It is entirely unjustified that the location of relays and access points is not public knowledge.

Summary

SSMA believes that the ACMA's varied responsibilities, in particular its aim to support the allocation of spectrum to its highest value use, places the ACMA in a conflicted role with respect to protecting the health of Australians. This makes it all the more incumbent on the ACMA to provide transparency and to demonstrably be seen to provide protection in its legislative instruments for the health or safety of all persons likely to be affected by the operation of radiocommunications transmitters and receivers.

The sunsetting of these legislative instruments has given the ACMA a valuable opening in which to re-examine its legislation, and bring it in line with current knowledge and risk-management practices. SSMA hopes the ACMA will not squander this opportunity. We believe it is a matter of some importance that the ACMA gives full consideration to SSMA's recommendations.

Yours sincerely

Janobai Smith
Secretary
Stop Smart Meters Australia Inc.
E: secretary@stopsmartmeters.com.au

References

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