

To the Department of Communications and the Arts  
GPO Box 2154  
Canberra ACT 2601

## Submission response—Possible amendments to telecommunications powers and immunities

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Yes

### Date of submission

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Logo of organisation—if an organisation making this submission



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### General comments

Stop Smart Meters Australia (SSMA) appreciates the opportunity to provide community feedback on possible amendments to telecommunications carrier powers and immunities.

We are very concerned at the limited scope of this consultation. Comment has not been sought on potential adverse health outcomes for the community and the environment as a result of exposure to man-made electromagnetic radiation from telecommunications infrastructure, and resultant long-term costs. The fact that facilities are deemed to be 'low-impact' is irrelevant and misleading as this label does not reflect potential harm caused by radiofrequency (RF) electromagnetic energy (EME) to the community and environment as a result of the operation of this infrastructure.

Framing the consultation as an attempt to balance the "community's need to access reliable, affordable telecommunications services whilst ensuring that local governments and communities have a say in the deployment of major telecommunications infrastructure" ignores potential long-term costs which the community may bear. To give an analogy, if speed limits were removed on regional highways, this would

mean that some people would be able to achieve greater productivity as they would reach their destinations faster; however, if the increase in speed limit was implemented without consideration for providing safer roads there would be an associated cost (more road fatalities and injuries) that would outweigh any possible public benefit.

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). 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 of their sensitivities. This has resulted in people suffering debilitating symptoms, not only when in the proximity of smart meters, but also when exposed to radiofrequencies from other sources, such as 'low-impact' facilities.

In some cases the impact on people's health has been profound, resulting in high personal costs (loss of career, loss of income, loss of place in society, loss of access to public facilities, loss of friends and family) for these people and their families as well as costs to the wider community. In addition to the decline 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; this makes the escalation of electro-pollution in rural areas a major concern.

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](#)). This represents a significant portion of the population. Given that it is considered that the number of people developing EHS is increasing, it is imperative that the Government factors the needs of this cohort into its analysis and allows these members of the community a voice.

Even in instances where people do not currently perceive an effect from being exposed to RF EME from telecommunications infrastructure, there is evidence that emissions may have adverse long-term effects. 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). This effect is a result of non-thermal levels of irradiation, and therefore is outside the scope of the protection intended by compliance with the radiofrequency standard set by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

It is also important that the Government considers the effects of EMF on the environment, including on bees, birds, wildlife and trees. There are a substantial number of studies pointing to adverse effects on

the environment as a result of emissions from telecommunications infrastructure. In a US 2016 [briefing memorandum](#) it was concluded that given the rapidly growing database of peer-reviewed, published scientific studies, it is time that the United States of America Federal Communications Commission "considers thermal and **non-thermal** effects from EMR [electromagnetic radiation] in their tower permitting" (my emphasis) and incorporates changes into their rulemaking regarding effects of communication towers on migratory birds.

ARPANSA's standard for radiofrequencies 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). Numerous scientific studies have shown that EMFs affect living organisms well below the limits set in ARPANSA's standard: "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](#)).

It is of concern that ARPANSA's standard has been further diluted as the Australian Communications and Media Authority (ACMA), being the regulatory body in respect of RF EME on humans, has not adopted ARPANSA's standard in full, having omitted the precautionary elements. Furthermore, the ACMA has confirmed that its role in relation to EMR focuses solely on the operation and performance of radiocommunications transmitters and that it is not responsible for investigating the health effects of human exposure to EMR.

The ACMA has also confirmed that its regulatory authority does not extend to the environment. It appears that no government authority in Australia has taken on board responsibility for regulating effects of emissions from telecommunications infrastructure on birds, bees, wildlife and trees.

The patent lack of adequate regulatory protection in Australia for humans and the environment from radiofrequency radiation makes it imperative that local governments and the community have a say in the deployment of telecommunications infrastructure. This right needs to be strengthened, not weakened. As it stands, Australians are being denied the basic right to control the levels of EMF being emitted into their homes, properties and communities from telecommunications infrastructure.

## Responses

The Australian Government seeks views on possible amendments to telecommunications carrier powers and immunities. In particular, the Government seeks views on:

## **Proposed amendments to the Telecommunications (Low-impact Facilities) Determination 1997**

### **1. Definition of co-located facilities**

- 1.1 Are there any issues with this proposed clarification to the definition of co-location?  
<response>

### **2. Local government heritage overlays**

- 2.1 Are there any issues with this clarification in relation to local government heritage overlays?  
<response>

### **3. Radio shrouds as an ancillary facility**

- 3.1 Should radio shrouds be considered ancillary facilities to low-impact facilities, or should radio shrouds be listed as distinct facilities in the Schedule of the LIFD?  
<response>
- 3.2 If listed as distinct facilities in the Schedule of the LIFD, should there be any criteria for radio shrouds, for example in terms of size and dimensions?  
<response>

### **4. Size of radiocommunications and satellite dishes**

- 4.1 Are there any issues with permitting 2.4 metre subscriber radiocommunications dishes (or terminal antennas) in rural and industrial areas (LIFD Schedule, Part 1, Item 1A)?  
Please see our general comments: potential harm caused by RF EME needs to be the deciding factor, not physical dimensions of equipment.
- 4.2 Are there any issues with permitting other 2.4 metre radiocommunications dishes in rural and industrial areas, including those located on telecommunications structures (LIFD Schedule, Part 1, Item 5A)?  
Please see our general comments: potential harm caused by RF EME to humans and the environment needs to be the deciding factor, not physical dimensions of equipment.

### **5. Maximum heights of antenna protrusions on buildings**

- 5.1 Is a 5 metre protrusion height acceptable, or is there a more appropriate height?  
Please see our general comments: potential harm caused by RF EME to humans and the environment needs to be the deciding factor, not physical dimensions of equipment.
- 5.2 Are higher protrusions more acceptable in some areas than others? Could protrusions higher than 5 metres be allowed in industrial and rural areas?  
Please see our general comments: potential harm caused by RF EME to humans and the environment needs to be the deciding factor, not physical dimensions of equipment.

### **6. Use of omnidirectional antennas in residential and commercial areas**

- 6.1 Are there any issues with permitting omnidirectional antennas in residential and commercial areas, in addition to industrial and rural areas?  
Please see our general comments: potential harm caused by RF EME to humans and the environment needs to be the deciding factor, not physical dimensions of equipment.

## **7. Radiocommunications facilities**

### **7.1 Does the proposed approach raise any issues?**

This approach appears to defy common sense as well as throwing precautionary measures to the wind. Obviously, the size of the wireless footprint is of paramount importance, rather than the size of components. Please see our general comments in regards to potential harm caused by RF EME.

### **7.2 Are the proposed dimensions for these facilities appropriate?**

Please see our general comments: potential harm caused by RF EME to humans and the environment needs to be the deciding factor, not physical dimensions of equipment.

## **8. Equipment installed inside a non-residential structure in residential areas**

### **8.1 Should carriers be able to enter land (including buildings) to install facilities in existing structures not used for residential purposes in residential areas?**

No, this is completely unacceptable. Local governments and the community must be given a voice regarding the deployment of telecommunications infrastructure.

## **9. Tower extensions in commercial areas**

### **9.1 Are there any issues permitting tower height extensions of up to five metres in commercial areas?**

Please see our general comments: potential harm caused by RF EME to humans and the environment needs to be the deciding factor, not physical dimensions of equipment.

## **10. Radiocommunications lens antennas**

### **10.1 Is lens antenna the best term to describe this type of antenna?**

<response>

### **10.2 Are 4 cubic metres in volume and 5 metres of protrusion from structures appropriate?**

Please see our general comments: potential harm caused by RF EME to humans and the environment needs to be the deciding factor, not physical dimensions of equipment.

### **10.3 Should this type of antenna be allowed in all areas, or restricted to only industrial and rural areas?**

Please see our general comments: potential harm caused by RF EME to humans and the environment needs to be the deciding factor in ALL areas, not physical dimensions of equipment. Rural areas are particularly sensitive areas in view of potential effects on the environment and due to increasing numbers of people seeking areas subject to low EMF.

## **11. Cabinets for tower equipment**

### **11.1 Are there any issues with the proposed new cabinet type?**

<response>

## **12. Size of solar panels used to power telecommunications facilities**

### **12.1 Are there any issues with permitting 12.5 square metre solar panels for telecommunications facilities in rural areas?**

<response>

## **13. Amount of trench that can be open to install a conduit or cable**

### **13.1 Are there reasons not to increase the length of trench that can be open at any time from 100m to 200m in residential areas?**

<response>

- 13.2 Is 200m an appropriate length, or should the length be higher if more than 200m of conduit or cabling can be laid per day and the trench closed?  
<response>

#### **14. Cable & conduit installation on or under bridges**

- 14.1 Are there any issues with allowing cable and conduit on bridges to be low-impact facilities?  
<response>

#### **15. Volume restrictions on co-located facilities**

- 15.1 Are there any issues with removing volume limits for adding co-located facilities to existing facilities and public utility structures in commercial areas?

Yes. Please see our general comments: potential harm caused by RF EME to humans and the environment needs to be the deciding factor, not physical dimensions of equipment.

- 15.2 Are there any issues with permitting new co-located facilities that are up to 50 per cent of the volume of the original facility or public utility structure in residential areas?

Yes. Please see our general comments: potential harm caused by RF EME to humans and the environment needs to be the deciding factor, not physical dimensions of equipment.

- 15.3 Is another volume limit more appropriate in commercial or residential areas?  
<response>

- 15.4 Should alternative arrangements for co-located facilities be developed in the LIFD?  
<response>

#### **16. Updates to environmental legislation references in the LIFD**

- 16.1 Are there any issues with the proposed updates?  
<response>

- 16.2 Are there any further suggestions for updates to terms and references in the LIFD?  
<response>

### **Proposed amendments to the Telecommunications Code of Practice 1997**

#### **17. Clarify requirements for joint venture arrangements**

- 17.1 Are there any issues with making it clear in the Tel Code that only one carrier's signature is required on documents for facilities being installed as part of a carrier joint venture arrangement?  
<response>

#### **18. LAAN objection periods**

- 18.1 Is it reasonable to end the objection period for low-impact facility activities and maintenance work according to when the notice was issued, rather than the date work is expected to commence?

No. Local governments and the community need to be given more time, not less time, to object. The ten business days notice period required by the Code is clearly inadequate.

- 18.2 Is 5 business days from the receipt of a notice a sufficient time period for land owners and occupiers to object to carrier activities where carriers have given more than 10 days' notice about planned activities?

Absolutely not. A minimum of 60 business days should be allowed to reflect the fact that land owners and occupiers may be temporarily absent or have other competing priorities to attend to.

## 19. Allow carriers to refer land owner and occupier objections to the TIO

- 19.1 Are there any issues with allowing carriers to refer objections to the TIO before land owners and occupiers have requested them to?

<response>

## 20. Updates to references in the Tel Code

- 20.1 Are there any issues with the proposed changes?

<response>

- 20.2 Are there any further suggestions for updates to the Tel Code?

It should be clearly set out that telecommunications companies are responsible for possible future costs arising from adverse health effects to humans and damage to the environment (including to birds, bees, wildlife and trees) due to RF EME.

Telecommunication companies should be required to install professional shielding (for instance, EMF-reducing window treatments, EMF-reducing paint) to buildings where occupants are being adversely affected by EMFs emitting from telecommunications' infrastructure and request such protection. It is unacceptable that affected householders must currently bear these costs if they wish to remain in their current home. SSMA has had reports of people outlaying tens of thousands (and even over \$100,000) on shielding.

Telecommunication companies should be required to set out how they have given consideration to the requirements of clause 5.7 (e) of ARPANSA's standard. This clause stipulates that unnecessary RF radiation should be minimised, provided this can be achieved at reasonable expense.

## Possible amendments to the *Telecommunications Act 1997*

### 21. Allowing some types of poles to be low-impact facilities

- 21.1 Is it reasonable for poles in rural areas for telecommunications and electricity cabling for telecommunications networks to be low-impact facilities?

No, absolutely not. If implemented this would pave the way for multiple additional (essentially uncontrolled, given the current legislation pertaining to 'low-impact' facilities) sources of RF EME.

- 21.2 Should low-impact facility poles be allowed in other areas, or be restricted to rural areas?

'Low-impact' facility poles should not be allowed in other areas or in rural areas. Potential harm caused by RF EME to humans and the environment must be considered in ALL areas.

- 21.3 Is the proposed size restriction of up to 12 metres high with a diameter of up to 500mm suitable?

Please see our general comments: potential harm caused by RF EME to humans and the environment needs to be the deciding factor.

21.4 Would the existing notification and objection processes for land owners and occupiers in the Tel Code be sufficient, or should there be additional consultation requirements?

Current notification and objection processes are grossly inadequate.

## **22. Portable temporary communications facilities**

22.1 - Are there any issues with making portable temporary communications equipment exempt from state and territory planning approvals under certain conditions?

Yes. A 'temporary' deployment is capable of causing serious consequences for humans and the environment.

22.2 - Are there any suggestions for appropriate conditions for the installation of COWs and SatCOWs, such as circumstances in which they can be used and timeframes for their removal?

<response>

22.3 - Should the Act be amended to remove any doubt that MEOWs can be installed using the maintenance powers or another power under Schedule 3 of the Act?

<response>

22.4 - Are there any suggestions for appropriate conditions for the installation of MEOWs if the maintenance powers are amended?

<response>

## **23. Replacement mobile towers**

23.1 Is the proposal reasonable?

Replacement of mobile towers should trigger a full review and consultation with local governments and the community in order to ensure that issues and emission levels associated with individual towers are being reviewed.

23.2 Is 20 metres a suitable distance restriction for replacement towers?

Potential harm caused by RF EME to humans and the environment must also be considered.

23.3 Is 12 weeks a reasonable maximum time period for installation of replacement towers?

<response>

## **24. Tower height extensions**

24.1 Are one-off 10 metre tower height extensions suitable in commercial, industrial and rural areas, or only some of these areas? If they are only suitable in some areas, which are they and why?

Please see our general comments: potential harm caused by RF EME to humans and the environment needs to be the deciding factor, not physical dimensions of equipment.