Chapter 3

Discussion of key issues

3.1 Many community groups and individuals supported the bill and believed that the additional requirements for carriers to consult more widely would result in better community consultation and improved rollout of telecommunications infrastructure.[1]

3.2 The bill's requirement for regular independent reviews of electromagnetic energy (EME) was also strongly supported by community groups and individuals.[2] The application of the precautionary principle to EME was seen by these groups as an important safeguard against any potential health issues caused by non-ionising radiation of the type associated with mobile telecommunications.

3.3 The bill was opposed by telecommunication carriers and their industry representatives.[3] According to these groups the bill would only serve to duplicate consultation requirements that are already imposed on carriers in existing codes and legislation. They argued the bill would also impose significant costs on carriers and would delay the rollout and repair of telecommunications infrastructure.

3.4 It was suggested by telecommunications carriers and the Department of Broadband, Communications and the Digital Economy (DBCDE) alike that the bill may have unintended consequences relating to the deployment and maintenance of telecommunications infrastructure, such as emergency communications facilities, simple maintenance issues and state and territory planning legislation.

3.5 As part of this inquiry many individuals and community groups raised concerns about individual telecommunications installations occurring in their area. The committee would like to reiterate that it is not the committee's role to investigate or pursue individual cases.

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1 For example see: Mr and Mrs Guy Maxwell, *Submission 4*; Mr Steven Green, *Submission 10*; Mrs Judy Thomas, *Submission 11*; Ms Jacqui Godwin, *Submission 14*; Mr Robert Taylor, *Submission 15*; Ms Bronwyn Johnstone, *Submission 16*; The Rivermouth Action Group Inc, *Submission 17*; Mrs Rhonda Hynes, *Submission 18*; Mrs Anthea Hopkins, *Submission 23*; Ms Wendy Taylor, *Submission 29*; and Ms Carol Parkinson, *Submission 38*.

2 For example see: Dr Jason Whitehead and Dr Fiona Taylor, *Submission 2*; Name withheld, *Submission 7*; Mrs Judy Thomas, *Submission 11*; Ms Joy O'Farrell, *Submission 13*; Ms Jacqui Godwin, *Submission 14*; Mr Robert Taylor, *Submission 15*; Ms Rhonda Hynes, *Submission 18*; Ms Rhonda Orso, *Submission 19*; Ms Ruth Valentine, *Submission 20*; Dr Don Maisch, *Submission 22*; Mr Enrico Grani, *Submission 35*; Ms Wendy McClelland, *Submission 43*; and Mrs Lynne McDonald, *Submission 56*.

3 For example see: Crown Castle, *Submission* 5; Telstra, *Submission 8*; Communications Alliance, *Submission 21*; AMTA, *Submission 33*; Optus, *Submission 36*; and Vodafone Hutchinson Australia, *Submission 46*.

3.6 As mentioned in Chapter 2, this chapter discusses key issues raised during the course of the inquiry, namely the requirement of carriers to notify and consult with landowners and community groups and the issue of EME. The chapter also examines potential costs and unintended consequences associated with the bill.

Notification, consultation and the complaints process

Notification

3.7 The bill seeks to impose additional requirements on carriers to notify land owners and communities of proposed installation or maintenance of telecommunications infrastructure. The bill would provide for changes to the current Ministerial Code of Practice so that telecommunication carriers must:

- notify and consult with owners and occupiers of land within 500 metres of any facility that will emit electromagnetic radiation; and
- provide full disclosure plans for the facility being installed (including cumulative electromagnetic emission reports and the likelihood of co-locations and upgrades) and the reasons for the selection of the site. [4]

3.8 The bill would also increase from 10 business days to 30 business days the time at which a carrier must give notice to owners and occupiers of the carrier's intention to conduct work.[5]

3.9 There was widespread support from individuals and community organisations for these provisions in the bill.[6] It was felt that at present there is an overall lack of community power and too much control residing with the telecommunications carriers. The Worried Householders Action Against Tower group (WHAAT!) asked:

> ...that the Telecommunications Act be amended to allow citizens to live safely in their homes, without the fear of Telecommunications companies sitting in an office, looking at a map and deciding the highest point in a town and deciding that spot is the best for their business, so they will forge forward, no matter what objection is raised by residents or agencies. If Telecommunications companies want to build, the wellbeing of the citizens must be paramount and residents must be consulted.[7]

3.10 The extension to the timeframe for notification was welcomed by a number of submitters who felt that 10 business days did not provide sufficient time for individuals and communities to organise themselves to discuss carriers' intentions. WHAAT! informed the committee that:

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4 Telecommunications Amendment (Mobile Phone Towers) Bill 2011, clause 12.

5 Telecommunications Amendment (Mobile Phone Towers) Bill 2011, clause 14.

6 For example see: Mrs Anthea Hopkins, *Submission 23*; WHAAT! *Submission 39*; Mr Ian Gray, *Submission 41*; No Towers Near Schools, *Submission 48*; and TAG, *Submission 51*.

7 WHAAT! *Submission 39*, p. 8.

> Such a short notice time to reply is blatantly unfair. It takes time for residents surrounding the proposed site, who in many cases do not know each other, to even call a meeting to discuss the way forward.[8]

3.11 Mrs Anthea Hopkins similarly argued that:

> The existing 10 day response period provided to communities is highly inadequate and is not nearly long enough to allow the community to provide an informed response...Anything shorter [than the 30 days] will unfairly disadvantage community members and not be representative of a genuine effort to consider community consultation. A shorter period would particularly disadvantage those in isolated locations, the elderly, those with disabilities, health issues or those who need to access translation services.[9]

3.12 Community groups also wanted to ensure that their concerns are heard from the very beginning of the planning and development process. Ms Sue Hetherington of WHAAT! described an example where despite a carrier undertaking planning for two years, the community was only notified of the installation of a telecommunications facility 10 days prior to the installation commencing (as per the current requirements).[10]

3.13 These provisions in the bill were opposed by carriers and the Australian Mobile Telecommunications Association (AMTA) on the basis they would duplicate existing requirements, increase costs and make maintenance work extremely difficult.[11]

3.14 AMTA submitted that the telecommunications industry has 'adequately demonstrated its willingness to notify properties in the surrounding area pursuant to the provisions of the Industry Code for Deployment of Mobile Phone Network Infrastructure'.[12]

3.15 The industry code, developed by the industry with input from community groups and local government, requires carriers to provide at least 10 business days notice for community consultation: AMTA emphasised that this is consistent with local government development application notice periods.[13]

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8 WHAAT!, *Submission 39*, p. 3.

9 Mrs Anthea Hopkins, *Submission 23*, p. 5.

10 Ms Sue Hetherington, Group Facilitator, WHAAT!, *Proof Committee Hansard*, 12 April 2012, p. 7.

11 See Telstra Corporation, *Submission 8*; AMTA, *Submission 33*; Optus, *Submission 36*; and Vodafone Hutchinson Australia, *Submission 46*.

12 AMTA, *Submission 33*, p. 30.

13 AMTA, *Submission 33*, p. 33.

3.16 According to AMTA, a 30 day notification period for some projects might be feasible.[14] However, AMTA was of the opinion that for most projects the imposition of a lengthy notification period would 'materially obstruct the carrier's ability to respond to customer demand and carry out standard network maintenance'.[15] AMTA noted that:

> Scheduling these activities around weather, project readiness, and staff and equipment availability is a considerable logistical challenge, and an increased notification period will substantially impede this ability.[16]

3.17 AMTA further informed the committee that the revised industry code will extend the notification period from 10 business days to 15 business days.[17]

3.18 Carriers and AMTA were also opposed to the proposed requirement for notification to be given to owners and occupiers within a 500 metre radius of an installation. It was suggested by AMTA that:

> The logistics and costs associated with indentifying all owners and occupiers within 500m is a very difficult task requiring (but not limited to) searching council records (where this is not restricted) and undertaking a formal Title Search. These activities would place a significant administrative burden on State Titles officers (where this is not automated) and Councils.[18]

3.19 Telstra echoed these concerns and informed the committee that it undertakes approximately 10 000 maintenance activities every year.[19] Under the bill the number of individual notices required could increase to 400 000 notices annually (based on there being 40 owners/occupiers within the 500 metre radius).[20] Telstra estimated that at a cost of $250 to prepare and send each individual notice, the additional notices required could cost the company $100 million annually.[21]

3.20 Similarly, AMTA quoted a Deloitte Access Economics report estimating that the additional annual costs resulting from the bill for maintenance activities could reach $1.42 billion dollars per annum.[22]

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14 AMTA, *Submission 33*, p. 32.

15 AMTA, *Submission 33*, p. 32.

16 AMTA, *Submission 33*, p. 32.

17 AMTA, *Submission 33*, p. 33.

18 AMTA, *Submission 33*, p. 30.

19 Telstra, *Submission 8*, p. 3.

20 Telstra, *Submission 8*, p. 3.

21 Telstra, *Submission 8*, p. 11.

22 AMTA, *Submission 33*, p. 31.

3.21 Telstra also raised concerns that the bill would require notifications to be issued for all maintenance activities and all low-impact facility installations which relate to radiocommunications infrastructure. Telstra stated that 'the range of activities caught by the new notification requirements in the bill is very broad and extends beyond facilities which themselves emit EME'.[23] Telstra believed the new provisions would require notification to be given for upgrading old technology antennae, reinforcing lattice towers damaged by corrosion, lifecycle replacement of batteries and feeder cabling, and like-for-like "swap-outs" of towers.[24]

3.22 DBCDE advised the committee that the bill's provisions for increased notification could result in delays for infrastructure rollouts and maintenance in emergencies.[25] The provisions may also limit a carrier's ability to provide reliable services thus impacting on their ability to carry out other statutory requirements, such as the Customer Service Guarantee.[26]

Consultation

3.23 The bill seeks to require carriers to consult with owners and occupiers of land within 500 metres of any facility that will emit EME.[27]

3.24 The Tower Action Group submitted that:

> At present, it would seem that community consultation is only undertaken as a last resort, well after leases have been signed, locations chosen and decision essentially made; consultation is presently seen by carriers as just 'one box to be ticked' rather than as a way of actively dealing with and listening to the concerns of local communities....We believe that community consultation is essential in the siting of telecommunications facility [sic], especially at sites close to, or potentially close to, community sensitive sites.[28]

3.25 Mrs Anthea Hopkins was similarly concerned that at present community concerns are not always listened to:

> Objections received by carriers, from the community or from councils, carry no weight and the carrier has no obligation (not even under the revised ACIF Code) to alter their plans in any way in response. Proper consultation should mean, that not only are communities properly notified and informed about proposals, and given the opportunity to respond, but

23 Telstra, *Submission 8*, p. 8.

24 Telstra, *Submission 8*, pp 8–9.

25 DBCDE, *Submission 42*, p. 8.

26 DBCDE, *Submission 42*, pp 7–8.

27 Telecommunications Amendment (Mobile Phone Towers) Bill 2011, para. 12(1A)(a).

28 TAG, *Submission 51*, p. 4.

> that their responses have some weight in the consultation process, and must be properly addressed by carriers.[29]

3.26 In response to claims such as these, AMTA opined that the current ACIF industry code and the revised edition currently awaiting approval from the Australian Communications and Media Authority (ACMA), provides an adequate framework for community consultation.[30] AMTA stated that 'the level of carrier activity associated with the Code consultation processes and provision of information is significant.[31]

3.27 AMTA estimated that on average 89 stakeholders were notified for each new telecommunications infrastructure site as part of the consultation process set out in section 5.5 of the industry code. AMTA asserted that this level of consultation compares favourably with council development application processes which consult on average 18 stakeholders.[32]

Complaints process

3.28 The bill proposes to amend the Ministerial Code of Practice to include a complaints process whereby owners and occupiers of land within 500 metres of a facility that will emit EME can make a complaint to the ACMA in relation to any or all of the following:

- the location of the facility; or
- compliance with the ministerial code; or
- compliance with any relevant industry standard.

3.29 Any work relating to the installation of the facility would be suspended until a complaint is resolved.

3.30 Some submitters to the inquiry argued that the existing complaints resolution process is deficient.[33] These submitters were particularly concerned that, in their view, the complaints process favours carriers over individuals and communities. Mr Ian Bullock of the Tower Action Group claimed:

> Complainants, as we have heard, are made to jump through many hoops just to get a complaint formally recognised and then carriers simply provide their evidence and correct their mistakes. This is deemed acceptable. There

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29 Ms Anthea Hopkins, *Submission 23*, p. 5.

30 AMTA, *Submission 33*, p. 20.

31 AMTA, *Submission 33*, p. 20.

32 AMTA, *Submission 33*, p. 20.

33 See Ms Sue Hetherington, WHAAT!, *Committee Hansard*, 12 April 2012, pp 1–2; Mrs Anthea Hopkins, Committee Hansard, *Committee Hansard*, 12 April 2012, p. 2; Mr Ian Bullock, TAG, *Committee Hansard*, 12 April 2012, pp 4–5; Mr Ian Gray, No Towers Near Schools, *Committee Hansard*, 12 April 2012, pp 6–7 and Ms Sharon Adlam, *Submission 45*, p. 3.

> is no interrogation of their evidence—it is just accepted as true and accurate—and, worse, complainants are then told that there will be no investigation as carriers have supposedly fulfilled their code obligations. How anyone can deem this as acceptable is, for us, simply beyond comprehension.[34]

3.31 On this basis, there was strong support from community groups for the complaints process proposed in the bill.[35]

3.32 By contrast, the Communications Alliance argued that the industry code had reduced the number of complaints made to the ACMA and was therefore an effective mechanism by which to regulate the installation of telecommunications infrastructure.[36]

3.33 The ACMA provided the following explanation of the existing complaints process:

> There is a complaints process that is established by the Telecommunications Act so that people can make complaints to the ACMA. The ACMA can consider the complaint...The ACMA can make preliminary inquiries. As a result of those preliminary inquires or simply considering it, they decide whether to investigate the complaint. We have received complaints that, in relation to the matters that the ACMA is responsible for, have not been within our jurisdiction or the scope of the Telecommunications Act. In that case, the complaint is resolved by the ACMA saying that it is not planning to take any action because the complaint is not relevant to our jurisdiction. In terms of resolution, it is really a matter for the ACMA, if it decides to investigate a complaint, to determine what action, if any, will be taken once it has formed a view about the matter that was complained about.[37]

3.34 The ACMA also informed the committee that the number of complaints they have received relating to telecommunications infrastructure has declined from 32 in 2006–2007 to 14 in 2010–2011.[38]

Electromagnetic energy (EME) emissions

3.35 The bill seeks to amend the *Australian Radiation Protection and Nuclear Safety Act 1998* to broaden the functions of the Radiation Health and Safety Advisory

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34 Mr Ian Bullock, TAG, *Committee Hansard*, 12 April 2012,

35 See for example Mr Ian Gray, *Submission 41*, p. 1 and TAG, *Submission 51*, p. 4.

36 Mr John Stanton, Chief Executive, Communications Alliance, *Committee Hansard*, 12 April 2012, pp 13–14 and Mr Chris Althaus, AMTA, *Committee Hansard*, 12 April 2012, pp 14–15.

37 Mr Mark Loney, Executive Manager, Operations Branch, ACMA, *Proof Committee Hansard*, 12 April 2012, p. 39.

38 ACMA, *Answers to questions on notice*, 12 April 2012, p. 3.

Council.[39] The additional functions for the council proposed in the bill would include 'reviewing the standard that relates to the limits for human exposure to radiofrequency fields in the frequency range 3 kHz to 300 GHz'.[40]

Regulation of EME in Australia

3.36 Many submitters to the inquiry were supportive of the proposal in the bill to require the Radiation Health and Safety Advisory Council to review the standard for EME from telecommunications infrastructure in Australia. These submitters mostly cited concerns about potential adverse health impacts associated with EME from mobile phone towers as the reason for their support.[41]

3.37 In response to these types of concern, Mr Ray McKenzie of AMTA informed the committee:

> In relation to people's concerns around EME, the industry understands that people have these concerns around health effects and is committed to addressing those concerns responsibly. We do that by taking advice in regard to those health effects and also in the way we deploy our networks. In regard to the advice we take, we do not pretend to be an authority on health effects. We look for experts and national and international authorities such as the World Health Organisation and also the Australian Radiation Protection and Nuclear Safety Agency...who provide us with advice regarding health effects...In relation to the way we deploy our networks, again, all our networks are deployed in accordance with strict science-based safety standards, and the safety standards are those adopted by the Australian Radiation Protection and Nuclear Safety Agency—which I will abbreviate to ARPANSA. Their limits are based, in effect, on the World Health Organisation's own standard, the International Commission on Non-Ionising Radiation Protection, or ICNIRP. So we deploy all our networks in accordance with those standards.[42]

3.38 ARPANSA advised the committee that the EME from telecommunications infrastructure:

> ...must comply with safety limits imposed by the Australian Communications and Media Authority (ACMA) in the *Radiocommunications Licence Conditions (Apparatus Licence) Determination 2003*...The safety limits in this document are based on the

39 Telecommunications Amendment (Mobile Phone Towers) Bill 2011, clause 2.

40 Telecommunications Amendment (Mobile Phone Towers) Bill 2011, clause 2.

41 See for example Dr Jason Whitehead and Dr Fiona Taylor, *Submission 2*; Mr and Mrs Guy Maxwell, *Submission 4*; EMR Australia, *Submission 6*; Mrs Judy Thomas, *Submission 11*; Ms Ruth Valentine, *Submission 20*; and Mr Enrico Grani, *Submission 35*.

42 Mr Ray McKenzie, Program Manager, Mobile Carriers Forum, AMTA, *Committee Hansard*, 12 April 2012, p. 13.

ARPANSA *Radiation Protection Standard - Maximum Exposure Levels to Radiofrequency Fields - 3kHz to 300GHz*. [43]

3.39 The ARPANSA 'Radiation Protection Standard – Maximum Exposure Levels to Radiofrequency Fields – 3 kHz to 300 GHz' (the Australian standard) provides the following EME exposure limits for the general public:[44]

Basic restrictions for whole body average specific absorption rate (SAR) and spatial peak SAR

Exposure category	Frequency range	Whole-body average SAR (W / kg)	Spatial peak SAR in the head and torso (W / kg)	Spatial peak SAR in limbs (W / kg)
General public	100 kHz–6 GHz	0.08	2	4

3.40 During the course of the inquiry, ARPANSA informed the committee that it was not responsible for ensuring carriers comply with the Australian standard for EME emissions from telecommunications facilities, but rather that this responsibility lies with the ACMA:

> We do not do the surveys to assess compliance. We are not the regulator. The Australian Communications and Media Authority is the regulator. They are the one that issues the licences. It is formally their act and licence conditions that the carriers are required to follow. They adopt our standard as the basis of their regulation. We are not the regulator of this matter. The survey we do is to provide public information about actual exposures and particularly to compare them with the EME reports, that you will have heard of already today, which provide a theoretical prediction. We do the measurements, doing our best to find the maximum exposure, to show comparisons with those EME reports. We do not do it to show technical compliance with the act or the regulations.[45]

3.41 Mr Mark Loney of the ACMA explained the ACMA's role in regulating EME emissions from telecommunications facilities:

> The ACMA is responsible for the actual compliance by radiocommunications transmitters of licence conditions. I should point out, and it is relevant to this bill, that EME levels are regulated by the ACMA, as the spectrum manager, under the Radiocommunications Act. ARPANSA

43 ARPANSA, *Supplementary Submission*, p. 2.

44 ARPANSA, Radiation Protection Standard – Maximum Exposure Levels to Radiofrequency Fields – 3 kHz to 300 GHz, available: http://www.arpansa.gov.au/pubs/rps/rps3.pdf (accessed 2 May 2012), p. 7.

45 Dr Lindsay Martin, Manager, Non-ionising Radiation Section, ARPANSA, *Committee Hansard*, 12 April 2012, p. 33.

> has made the health exposure standard and the ACMA has taken the health exposure standard and the limits established in the health exposure standard and incorporated them into conditions of licence for radiocommunications licences issued under the Radiocommunications Act. Those limits, as I said, based on the ARPANSA standard, apply to all radiocommunications transmitters that operate in Australia, including base stations for mobile phone networks.[46]

3.42 DBCDE and the ACMA clarified that carriers are required to provide a predictive report, which is completed 'in advance of the construction of the facility so that the community knows what the EME exposure levels will be'.[47] DBCDE explained that the predictive reports are 'prepared according to a methodology produced by ARPANSA and in a format approved by ARPANSA'.[48]

3.43 DBCDE further advised the committee that:

> ARPANSA has checked its methodology for predictive reports by conducting surveys of base stations in 1999, 2003 and 2007-12. The 2003 survey was published in the journal *Bioelectromagnetics* in 2006 [*Bioelectromagnetics* (2006) 27:73-76]. That survey showed the predicted exposure levels for all sites measured exceeded the actual measured exposure values.[49]

3.44 The ACMA indicated that it had received 'a small number of complaints or inquiries about whether particular installations have complied with the EME limits'.[50] In relation to these complaints, Mr Loney stated:

> I am not aware of any case where the subsequent ACMA inquires and measurements have resulted in us identifying a site that was operating beyond the limits specified in the licence conditions. They are, as I mentioned before, based on the human exposure standard made by ARPANSA. The ACMA also conducts a program of site audits, where we go to radiocommunications sites and look for compliance issues.[51]

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46 Mr Mark Loney, Executive Manager, Operations Branch, ACMA, *Committee Hansard*, 12 April 2012, p. 42.

47 Mr Mark Heazlett, Acting First Assistant Secretary, NBN Implementation Division, DBCDE; Mr Mark Loney, Executive Manager, Operations Branch, ACMA; and Mr Philip Mason, Assistant Secretary, NBN Regulation, NBN Implementation Division, DBCDE, *Committee Hansard*, 12 April 2012, pp 45–47.

48 DBCDE, *Answers to questions on notice*, 12 April 2012, p. 1.

49 DBCDE, *Answers to questions on notice*, 12 April 2012, p. 2.

50 Mr Mark Loney, Executive Manager, Operations Branch, ACMA, *Committee Hansard*, 12 April 2012, p. 42.

51 Mr Mark Loney, Executive Manager, Operations Branch, ACMA, *Committee Hansard*, 12 April 2012, p. 43.

3.45 In response to queries about the compliance of telecommunications facilities with EME emission standards, the committee was informed that of approximately 18 000 telecommunication installations in Australia, the ACMA had audited 474:

> With regard to compliance with EME licence conditions, the ACMA conducted an audit program between 2006 and 2008 that involved the auditing of 474 sets of EME records held by licensees. It is a condition of a licence that licensees hold records that demonstrate compliance with the EME conditions that apply to apparatus and spectrum licences.[52]

International EME emission standards

3.46 During the course of the inquiry, there was some discussion about the Australian standard for EME emissions in comparison to standards used internationally. In particular, the standard in Switzerland was raised by some submitters. For example, Ms Anna Castellano of No Towers Near Schools stated:

> Last year the Council of Europe said that non-ionising radiation, which is in fact EMR, used in telecommunications:
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> "… appear to have more or less potentially harmful, non-thermal, biological effects on plants, insects and animals, as well as the human body when exposed to levels that are below the official threshold values...One must respect the precautionary principle and revise the current threshold values; waiting for high levels of scientific and clinical proof can lead to very high health and economic costs, as was the case in the past with asbestos, leaded petrol and tobacco".
>
> This resonates with communities. This is what is going to happen to us in the future. There are more and more of these base stations all over the country, constantly.
>
> The council goes on to recommend a threshold of 0.1 microwatt per centimetre squared. Let us remind ourselves once more that the ARPANSA limit is 450. We know of nine countries in Europe who have adopted the precautionary approach and have already lowered their EMR levels; Switzerland comes to mind.[53]

3.47 In regards to the EME emission standard in Switzerland, Dr Lindsay Martin of ARPANSA commented:

> I understand it was generally as a response to community concern. They have also done that in the extremely low frequency area as well. I believe that was partly to facilitate the deployment, by clarifying, by reducing a level, and avoiding the need to do a case-by-case assessment of many examples. That is why they introduced a precautionary level...Clearly, in some cases a particular person who made that decision may have seen a

52 ACMA, *Answers to questions on notice*, 12 April 2012, p. 2.

53 Ms Anna Castellano, Community Representative, No Towers Near Schools, *Committee Hansard*, 12 April 2012, pp 3–4.

> scientific paper and acted on it—I cannot possibly know that—but I am not aware of any particular evidence that scientists in these countries have put forward that says, "We need this level because of this particular effect, this particular scientific background".[54]

3.48 ARPANSA also provided the committee with an international comparison of EME exposure limits for the general public.[55] These limits for selected countries are outlined below.

Exposure limits for the general public for electromagnetic fields in inhabited areas in member states of the European Union and selected industrial nations outside the European Union[56]

	50 Hz		900 MHz			1800 MHz		
	Electric field strength	Magnetic flux density	Electric field strength	Magnetic flux density	Equivalent plain wave power density	Electric field strength	Magnetic flux density	Equivalent plain wave power density
	V / m	µT	V / m	µT	W / m^2	V / m	µT	W / m^2
France	5000	100	41	0.14	4.5	58	0.20	9
Germany	5000	100	41	0.14	4.5	58	0.20	9
Hungary	5000	100	41	0.14	4.5	58	0.20	9
Sweden	-	-	41	0.14	4.5	58	0.20	9
United Kingdom	-	-	41	0.14	4.5	58	0.20	9
Australia	5000	100	41	0.14	4.5	58	0.20	9
Switzerland	-	1	4	-	-	6	-	-
USA	-	-	-	-	6	-	-	10

Potential costs and unintended consequences

3.49 A number of submitters discussed potential costs and unintended consequences associated with the bill if it were enacted. The telecommunications industry identified costs associated with increased administration and 'sub optimal'

54 Dr Lindsay Martin, Manager, Non-ionising Radiation Section, ARPANSA, *Committee Hansard*, 12 April 2012, pp 31–32.

55 ARPANSA, *Answer to question on notice*, 12 April 2012.

56 Rianne Stam, National Institute for Public Health and the Environment (The Netherlands), 'Comparison of international policies on electromagnetic fields (power frequency and radiofrequency fields)', May 2011, pp 9–10.

network performance and maintenance.[57] Local government was concerned that there may be 'unintended consequences in terms of additional burdens and costs falling on councils'.[58]

3.50 Crown Castle felt the bill would create 'considerable uncertainty for the wireless telecommunications industry at a time when critical investment decisions are being made' as well as '[a]n uncertain regulatory environment' that would increase '...the cost of equity associated with bidding for spectrum and, therefore, reduces the bid price and the ultimate returns to taxpayers on that valuable community asset'.[59]

3.51 As discussed earlier in this chapter, AMTA and Telstra believed the bill would impose significant costs on the telecommunications industry. AMTA, quoting analysis by Deloitte Access Economics, claimed the bill would have an overall annual cost of $2.2 billion comprising $2.06 billion per annum of additional administration costs, $132 million per annum arising from a sub-optimal network outcome and $14 million per annum reflecting the delay to required facility construction, upgrade or maintenance.[60]

3.52 AMTA continued:

> AMTA fails to see what, if any, benefits the Bill would deliver over the existing regulatory requirements. Indeed, it would impose a range of costs on industry, the community and local governments and result in unintended consequences that could lead to less community consultation and not more as the Bill intends.[61]

3.53 Mr Adrian Beresford-Wylie, Chief Executive Officer of the Australian Local Government Association (ALGA) cautioned that:

> We are flagging that [potential cost impacts are] something that always needs to be considered in terms of regulatory responsibilities being placed on local government or when their responsibilities are expanded—although, as our discussion has turned to, community consultation and issues like this are a responsibility of local government anyway. Therefore it is just ensuring that local government is appropriately resourced, which really relies on a state government.[62]

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57 See for example AMTA, *Submission 33*, p. 7 and Telstra, *Submission 8*, p. 11.

58 Mr Adrian Beresford-Wylie, Chief Executive Officer, Australian Local Government Association (ALGA), *Committee Hansard*, 12 April 2012, p. 21. See also WA Department of Planning, *Submission 28*, p. 4 and Tweed Shire Council, *Submission 52*, p. 2.

59 Crown Castle, *Submission 5*, pp 3–4.

60 AMTA, *Submission 33*, p. 7.

61 AMTA, *Submission 33*, p. 36.

62 Mr Adrian Beresford-Wylie, Chief Executive Officer, Australian Local Government Association (ALGA), *Committee Hansard*, 12 April 2012, p. 26.

3.54 DBCDE concurred that the changes proposed in the bill would likely 'place a significant administrative burden on local government planning department resources' and:

> ...may delay premises connections to networks, including where a service has been requested in fulfilment of the Universal Service Obligation (USO). Furthermore, they may limit carriers' land entry powers to the extent they are inconsistent with state or territory legislation. This may affect the ability of carriers to effectively maintain their existing networks, including fixed line and backhaul networks. If the bill were enacted, it may therefore be necessary to review certain existing consumer protection regulation, such as the USO and Customer Service Guarantee, to ensure that the timeframes for connection and repair of services allow for the relevant approvals to be received.[63]

3.55 The department also identified other unintended consequences of the bill, including:

- extension of the application of Schedule 3 resulting in the capture of organisations that install private networks such as other utilities, police, emergency services organisations, defence organisations, broadcasters, taxi services and potentially some local councils, community organisations such as surf clubs and individuals installing devices in their home;
- amending the definition of "tower" which may prevent the installation of most radiocommunications antennae under Schedule 3 of the Act 'thus inhibiting the deployment of radiocommunications equipment generally to both transmit and receive';
- amending the maintenance clause which may result in activities such as changing the visible light emitted, replacing defective indicator lights on an electronic panel or infrared radiation emitted by a warm object being excluded from the Schedule 3 immunities;
- extension of the notification period which could delay infrastructure roll-outs and maintenance, particularly in unforeseen circumstances; and
- requiring a carrier to prepare a Local Telecommunications Network Plan and making this plan publicly available which 'may have significant implications for critical infrastructure protection'.[64]

Committee view

3.56 The committee is sympathetic to the concerns voiced by communities when they are faced with the prospect of a telecommunication infrastructure development in their region. The information provided during the course of this inquiry demonstrates the difficulties some communities encounter when seeking to engage in planning and

63 DBCDE, *Submission 42*, pp 6–7.

64 DBCDE, *Submission 42*, pp 6–9.

development processes, and how these processes can make individuals and communities feel disempowered and frustrated.

3.57 The committee was heartened, however, by advice from the telecommunications industry and the industry regulatory about improvements that have been made to the industry code of conduct in response to the concerns and experiences of individuals and communities. The committee was equally pleased to hear that community representatives had participated in development of the revised industry code. The revised code, Industry Code C564:2011 Mobile Phone Base Station Deployment, is due to come into effect on 1 July 2012. The committee trusts that the telecommunications industry will fully comply with the revised industry code, as well as all other applicable regulations, and will strive to improve its relationships with affected communities through considered, transparent and effective consultation practices. Failure to improve community engagement as a result of the changes to the industry code could require further legislative amendments to ensure the community is and feels part of the process, and has access to real and effective communication and consultation processes.

3.58 That said, the committee recognises consumer demand for improved telecommunication services, particularly wireless services, and that this requires the installation of telecommunications infrastructure. As mentioned above, this places obligations on carriers with respect to consultation and community engagement and, in the committee's opinion, it also requires consumers—including those in regional and rural Australia—to acknowledge that telecommunications infrastructure must be built in their area if they are to access these services.

3.59 With respect to EME emissions from telecommunications installations, the committee notes that an apparently low number of these installations are audited by the ACMA. Whilst recognising resource limitations, the committee urges the ACMA to conduct regular audits of telecommunication installations to ensure, and give confidence to communities, that these installations are compliant with Australian EME emission standards.

3.60 The committee acknowledges the potential costs and unintended consequences associated with the bill as identified by various submitters. It is the committee's view that these costs and unintended consequences suggest the bill is impractical and would not effectively resolve the concerns it is seeking to address. On that basis, the committee recommends that the bill not be passed.

Recommendation 1

3.61 The committee recommends that the bill not be passed.

Senator Doug Cameron
Chair