



*Living more safely with
electromagnetic radiation*

Telecommunications facilities

a resource kit for
communities
in Australia

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To the reader

This resource kit has been compiled to help you respond quickly and easily to an application for a proposed telecommunications facility in your area.

As we are aware that your time to respond to the application is limited, this kit has been designed to be as comprehensive, yet as succinct as possible. It allows you to navigate your way through a maze of regulations by selecting just those avenues that are appropriate to your needs.

We hope that you find this information of assistance, and would appreciate your feedback.

Those of you who would like more information about EMR and health may find the book *'The Force – living safely in a world of electromagnetic pollution'* a useful resource.

Lyn McLean
Director EMR Australia PL

Last revised 2012

Note: This kit is intended for guidance purposes and the information it contains does not constitute legal advice.

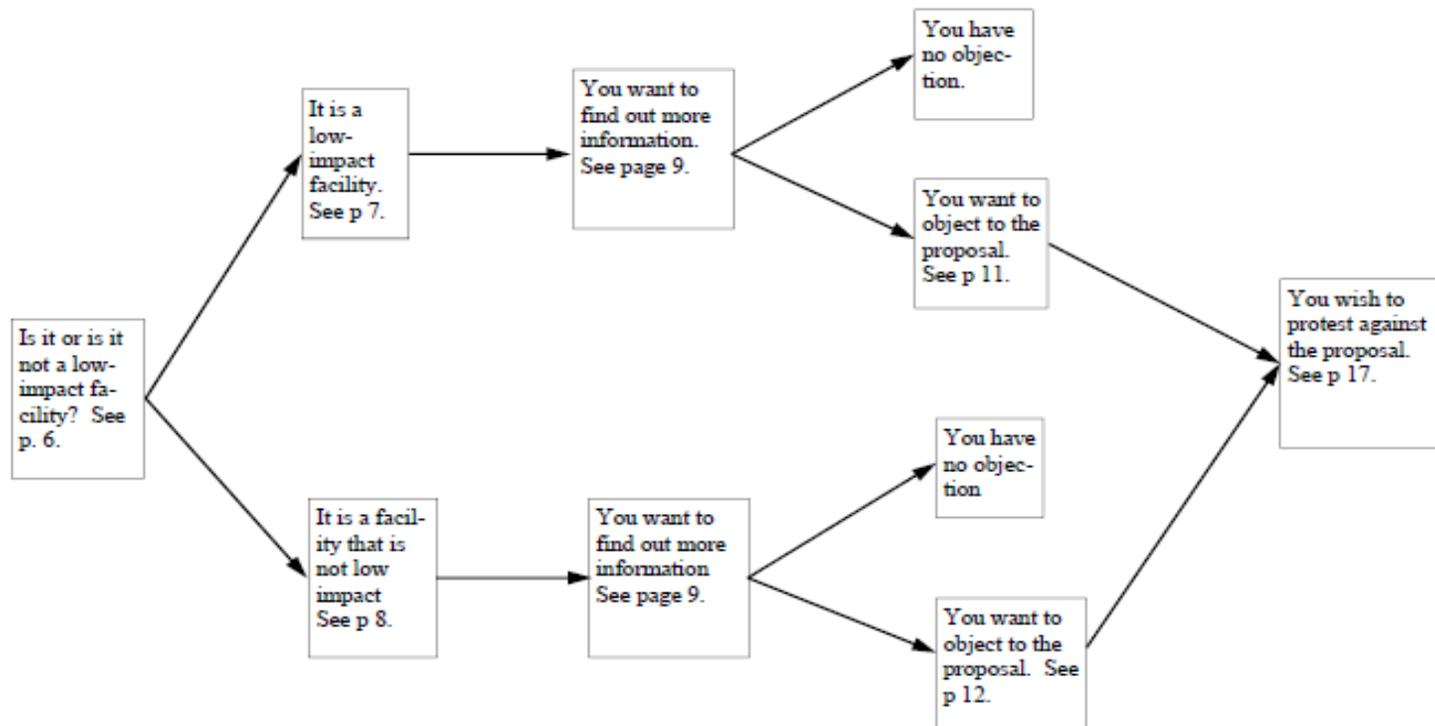
**Received notification about a proposed
telecommunications facility?**

What can you do?

Contents

Options flowchart.....	5
What can you do?.....	6
If it is a low impact facility.....	7
If it is not a low impact facility.....	8
For more information about a proposed facility.....	9
To object to a low impact facility.....	11
To object to a facility that is not low impact.....	12
CA Code for the Deployment of Mobile Phone Network Infrastructure.....	13
Breaches of the CA Code – Lodging a complaint to the ACMA.....	15
Community protests.....	17
Taking the message to Canberra.....	21
Carrier wants to enter your land.....	22
Carrier wants to erect a LIF on your land.....	23
Resource materials	
The standard.....	25
RF Map.....	27
Rights of carriers, councils, communities.....	28
Relevant legal cases.....	32
Frequently asked questions.....	36
Contacts.....	38
Terms and abbreviations.....	39
More Information.....	40

Carrier wants to construct a base station near you



Received notification about a proposed mobile phone antenna near you?

What can you do?

The first thing to do is to ascertain whether or not the proposed facility is a low impact facility. This information should be contained in the notification you have received.

If it is a low impact facility, go to page 7.

If it is not a low impact facility, go to page 8.

If it is a low-impact facility...

Low impact facilities do not require approval from councils for their construction.

The Telecommunications Act 1997 allows a carrier to “carry out the installation of a facility if ... the facility is a low-impact facility” with or without the approval of the council and whether or not the installation complies with State and Territory legislation. (Schedule 3, division 3, clause 5.1)

For a facility to be considered “low-impact” it must be listed in the *Telecommunications (Low-impact Facilities) Determination 1997 (as amended)*. It is available from <http://www.comlaw.gov.au/Details/F2004C01082>. Only the items described in the Determination are low-impact.

Low impact facilities are *not* low impact in terms of the amount of radiation they emit.

Carriers are expected to comply with the Communications Alliance (CA) Code called ‘Mobile Phone Base Station Deployment’ when selecting sites for, designing, installing and operating low impact facilities. A copy of this Code can be found at <http://www.commsalliance.com.au/Documents/all/codes/c564>.

Be aware that a facility that a carrier claims is a low impact facility may not necessarily be a low impact facility. There are situations in which courts have contradicted a carrier’s judgment about the low impact status of a facility.

In order to ascertain whether a facility is a low impact facility, you will need to see whether the carrier’s plans for it comply with the *Telecommunications (Low-impact Facilities) Determination 1997 (as amended)*. The regulator for telecommunications facilities is the Australian Communications and Media Authority (ACMA). However, ACMA does not adjudicate on whether a facility complies with this Determination and has advised that compliance must be tested in court.

Melbourne solicitor Phillip Nolan, who specialises in this area of law, has provided communities with guidance on matters of this sort.

For information about how you can obtain more details about the facility, see page 9.

For information about how you can object to a low impact facility, see page 11.

For information about the CA Mobile Phone Base Station Deployment Code, see page 13.

If it is not a low-impact facility...

A facility that is not a low impact facility must be approved by council, following the normal development application (DA) process.

Your comments about the proposed facility need to be addressed to council, not the carrier.

For information about how you can obtain more details about the proposed facility, see page 9.

For information about how to lodge objections to the facility, see page 12.

For more information about a proposed facility...

Some information that members of the community have found helpful is listed here.

1. The electromagnetic radiation (EMR) exposures from the facility

Carriers are required by law to provide information about the emissions from a facility. The CA Mobile Phone Base Station Deployment Code states that “a Carrier must provide, as soon as practicable and at no charge, the following information to members of the public on request:

- (a) a description of their radiofrequency infrastructure on the site;
- (b) the radio frequency bands as per the ARPANSA EME Report format;
- (c) a declaration that their infrastructure is in compliance with the ACMA mandatory limits for general public exposure to RF EMR;
- (d) details of any RF hazard areas associated with their infrastructure and management practices to restrict access to RF hazard areas;
- (e) the levels of exposure to EMR emissions in accordance with the ARPANSA report;
- (f) coverage information of the area.” (10.2.2)

Carriers have the capacity to produce computer-generated maps that predict the exposures to members of the public at a given location or within a given radius. (See *RF Map*, p. 31.)

Exposures can be expressed as measurements of electromagnetic field given in microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$) or as a percentage of the Australian standard. EMR Australia Pty Ltd believes that it is more useful to have this information in $\mu\text{W}/\text{cm}^2$ (see facts sheet on the *Standard* p. 25).

2. What is the likely impact on health from these emissions?

The Federal Government’s position is that “There is no evidence of a link between exposure to radiofrequency (RF) EME and adverse health effects in humans at levels below the limits specified in the ARPANSA Radiation Protection Standard (2002).” (ARPANSA fact sheet “Government action on electromagnetic energy public health issues”

The Mobile Carriers Forum “believes that there are no adverse health risks linked to using mobile phones or living near mobile phone base stations.”

However, some scientists and groups of doctors believe that EMR may be a risk to health at levels far below Australian and international standards. Information about these effects can be found in ‘The Force’, available from www.emraustralia.com.au.

3. What is the likely visual impact?

The CA Mobile Phone Base Station Deployment Code requires carriers to provide councils with a written description of proposed facilities that do not require DAs.

Carriers sometimes also provide councils with photo montages to show what the facility will look like on the given site. Sometimes photo montages show a perspective that does not reflect all infrastructure intended for the site such as equipment sheds.

Carriers sometimes provide councils with detailed drawings of the facility.

To object to a low-impact facility...

You can object to the carrier within 15 business days of receiving notification about the facility. It is the carrier, not the council, which has the right to make the decision about whether or not a facility proceeds as planned.

- Some carriers have amended or withdrawn proposals based on the reaction of the community.
- Others have not responded to community objections.

When a carrier receives a complaint, it is required by the CA Mobile Phone Base Station Deployment Code to:

- send a letter acknowledging a complaint within ten working days of receiving the complaint
- advise the complainant of the outcome of their complaint (Section 11).

If you believe that the carrier has not complied with the provisions of the CA Mobile Phone Base Station Deployment Code, you can complain to the ACMA. See *Breaches of the CA Code* page 15.

Some communities have successfully prevented low impact facilities being constructed by a strong community protest directed at the carrier. For information on conducting community protests, see page 17.

To object to a facility that is not low-impact...

For a facility that is not low impact, you can forward your objections to Council, as it is the relevant consent authority.

To be approved or rejected, a proposed facility must be considered by council planners and sometimes by the councillors.

If council rejects the carrier's application, the carrier has the right, as does any applicant, to appeal to the relevant state court or tribunal.

- Rejections based on health risks of EMR have generally been overturned in state courts (see *Legal* section). For this reasons, councils do not always respond favourably to submissions based on health concerns alone.
- Some rejections by councils that have been based on planning considerations have succeeded (see *Legal* section).

Methods that have been used by community groups to lobby councils include the following:

1. getting in touch with each councilor individually and alerting them to their concerns;
2. reminding council of its legal obligations under state legislation to protect communities and the environment;
3. encouraging a large number of people to lodge objections to council;
4. asking council to consider whether, as consent authority, it may be legally liable for damages if EMR is *proven* to cause health problems.

If you believe that the carrier has not complied with the relevant sections of the CA Mobile Phone Base Station Deployment Code in constructing a facility, you can lodge a complaint with the ACMA. See *Breaches of the CA Code* page 15.

Some communities have successfully prevented not-low impact facilities being constructed by a strong community protest directed at the council. For information on conducting community protests, see page 17.

Communications Alliance Code: Mobile Phone Base Station Deployment

The Mobile Phone Base Station Deployment Code was developed by a committee of the Communications Alliance, an industry group representing the carriers. The committee included representatives from the telecommunications industry and the community, including the writer. The Code replaces an earlier version of the code, known as the Code for the Deployment of Mobile Phone Network Infrastructure, often referred to as the 'ACIF Code'. In its original form, it was registered by the then Australian Communications Authority (ACA) in 2002 but only became fully operational on 10 April 2003. The latest version of the Code was registered by the Australian Communications and Media Authority (ACMA) in April 2012 and became operational on 1 July, 2012.

The Code applies to mobile phone network infrastructure (towers etc) constructed by carriers for the provision of a mobile telecommunications service under the Telecommunications Act 1997. It applies to facilities that are both low impact and not low impact facilities, though the consultation requirements of the Code do not apply to facilities that require Development approval from a local council.

The code is legally binding on carriers (under the Telecommunications Act 1997). It is the role of the ACMA to ensure that carriers comply with the Code and to investigate alleged Code breaches.

The Code requires carriers to:

- provide information on forward planning for the region if requested by councils;
- demonstrate they have applied a precautionary approach to the siting, design and operation of infrastructure;
- notify councils and immediate residents of low power infrastructure and fixed radio link installations;
- conduct community consultation when installing infrastructure at new sites (where no Development Application to council is required) and provide information about the project on a website;
- publish an ad in the public notices section of a paper circulating in the area inviting public comments when installing infrastructure at an existing site;
- provide the public with free information about health and safety and emissions from facilities on request;
- respond to community complaints.

The Code is not able to address all concerns that have been raised by communities when carriers have installed infrastructure. For example, it cannot:

- contradict other legislation
- prevent a carrier from installing a facility
- control the behaviour of councils, other authorities or individuals
- require a carrier to conduct consultation for facilities that require DAs from councils

- undermine a carrier's rights in legislation, such as its ability to go onto a property to conduct maintenance of a facility.

The Code provides best-practice templates for consultation (envelopes, letters and signage).

It requires carriers to use the consultation symbol below on documentation about phone towers so that proposals can be more easily recognised by the community.



The Code can be found at www.commsalliance.com.au/Documents/all/codes/c564.

The 2012 Code committee developed an information portal hosted on the webpage of the Communications Alliance which undertook the revision process. This portal provides links to sites with useful information related to the installation of base stations and can be found at <http://www.commsalliance.com.au/mobile-phone-tower-information>.

Breaches of the CA Code -

Lodging a complaint with the ACMA

The Australian Communications and Media Authority (ACMA), as the regulatory authority for the telecommunications industry, investigates suspected breaches of the CA Code Mobile Phone Base Station Deployment.

If you suspect that a carrier has breached this CA Code, you can complain in writing to the carrier. The CA Code requires the carrier to acknowledge your complaint within ten working days and to advise you of the outcome of your complaint in writing. Most carriers aim to do so within 20 working days.

If you wish to complain to the ACMA about a suspected breach of the CA Code, you should do so in writing. Complaints can be forwarded to:

Telecommunications Deployment Operations Branch
Australian Communications and Media Authority
PO Box 78
Belconnen ACT 2617

Where a carrier contravenes the Code, the ACMA has the power to issue a formal warning and to direct a carrier to comply with the Code. Where a breach is serious enough, and a carrier fails to comply with a direction, the Federal Court may order the relevant carrier to pay a fine.

Guidelines for writing a letter of complaint

1. Keep your letter simple and factual. You could include subheadings and dot points.
2. Avoid emotion.
3. State the section of the Code you believe that the carrier has breached and give reasons to support your opinion.
4. Provide supporting evidence. This could include, for example,
 - a copy of correspondence from the carrier
 - a copy of the carrier's consultation plan as lodged to council
 - a photograph of the site
 - clipping of an advertisement in a newspaper.
5. Attach a copy of your written complaint to the carrier and a copy of the carrier's written response.

Your complaint has a greater chance of being proven if it relates to the mechanics of a carrier's behaviour, such as:

- failure to provide sufficient number of days for consultation
- failure to comply with the consultation plan provided to council
- incorrect details provided in newspaper notice.

Your complaint has a lesser chance of being proven if it relates to the philosophy or spirit of the Code, for example:

- if it is about consideration of sensitive areas
- if it is about the application of the precautionary approach.

Likely outcomes

If the ACMA believes that there are sufficient grounds to believe that a carrier has breached the CA Code, the likely outcome is that it will:

- issue a warning to the carrier or
- issue a letter to the carrier, directing the carrier to comply with the Code.

The ACMA's powers are limited to warnings and directions to comply with the Code.

The ACMA is not able to satisfy all complainants. It cannot, for example:

- assess whether or not a facility is low impact
- make judgments about the merits of a facility
- act on complaints about carriers that do not constitute a breach of a specific requirement of the CA Code.

Community protests

Obtaining support

- Establish a committee or group to run a protest campaign. Don't try to do everything by yourself – you'll only burn out.
- Look for potential allies such as precinct committees, community groups, school P&Cs, chambers of commerce.
- Establish an alliance of groups (such as those above) to sign letters or distribute petitions.
- Approach local members of parliament or councillors – even if they do not have the power to reject the proposal. Their support can be invaluable. Some MPs have allowed community groups to use their photocopying and fax facilities.

Getting the message to the public

- To obtain support for your campaign, you will need to get information to the public.
- Street stalls are a useful way of signing people up for various roles, getting signatures on petitions, distributing information and displaying banners.
- You can consider banners or advertisements displayed on the site, in shop windows, in people's yards etc.
- Construct a website on the issue containing fact sheets, media articles etc and link to as many sites as possible.
- Other ways of getting the message to the public are letterbox drops, media attention and public meetings – see below.

Letterbox drops

- This is an effective way to alert the community to the issue and to invite their support.
- Keep the information on the leaflet short and to the point. (Long paragraphs and too much detail are less likely to be read).
- Tell readers what they can do eg:
 - attend a community meeting on Thursday at 7.30 pm at the local scout hall.
 - write to Mr X Person at given address by such-and-such a date.

Media attention

- Gaining media attention is perhaps the best way of bringing the issue to public attention.
- Some proponents are more sensitive than others about their public image.
- Where possible obtain the interest of the city-based media, including TV, radio and print. These media are usually interested in a unique or novel angle for a story. Don't forget radio talkback programs as an option.

- Invite the local paper to run a series of articles. Provide photo opportunities wherever possible. Keep the issue hot with letters to the Editor.
- Create media opportunities – look for photo opportunities wherever possible and stage interesting or unusual events.
- Keep issuing media releases and send them to targets and government representatives. Even if they don't get coverage, they will be read and may receive a response, thus generating public debate.

Writing a good media release

- It's a good idea to keep the media release to one page.
- Keep your message short, easy to understand and free of jargon.
- Imagine that your audience, including the journalist reading the release, knows absolutely nothing about the issue.
- Make your main point in the first paragraph.
- Subsequent paragraphs should expand on the first statement by introducing new facts, drama or explanation.
- Provide catchy quotes.
- Include contact details for further information.

Public meetings

- These have the advantage of informing/educating the public, of conveying strong community sentiment to the proponent or council and of being a forum for resolutions.
- Some ways of advertising public meetings are:
 - letterbox drops to locals
 - articles in local papers
 - sign on site
 - letters to parents of local school or kindergarten students.
 - letters to local community groups (eg precinct committee, chamber of commerce, sports club).
- The best public meetings are well organized and have considered some of the following points.
- The meeting should not be too long or people will become tired or bored or begin drifting away. Two hours is often a reasonable time.
- Invite speakers who will put opposing points of view. Make sure they are aware of the time limits for their presentation.
- Have an agenda that allows each speaker to speak for perhaps ten minutes, to keep audience attention high.
- It is important to have a strong chairman who can ensure that speakers keep to their allocated time on the program, that people do not interrupt and that questions are handled appropriately.
- Keep questions to the end, as questions can detract focus from the main issues, become boring for audience and throw time-allocation out.
- Invite the media to attend and ask for coverage from local newspaper.
- Decide what outcomes you want from the meeting eg
 - resolutions endorsed by the meeting

- an article in the local press
- signatures on a petition. (If so, have the petition & pens circulating during the meeting or have copies near the hall entry.)
- a fighting fund (If so, have a collection tin circulating or near the entrance.)
- people to help with particular activities eg letterboxing, writing, media liaison. (If so, have a list for people to sign.)
- individual letters written (If so, have list of addresses and, perhaps, writing paper and pens.)
- Have relevant equipment eg
 - sound system and microphone
 - overhead projector (with backup globe) or powerpoint projector
 - extension cords
- Foreshadow future action eg
 - next meeting of action committee
 - street stall
 - relevant meeting of council.

Petitions

- Petitions are not a particularly effective way of influencing the consent authority. For example, carriers do not regard each name on a petition as an individual complaint to be responded to.
- However, petitions are useful as a statistical tool that can allow the campaign organisers to claim “two thousand residents in this community object to the proposal to mine sand at Barleythrop”, for example.
- A good petition should:
 - state to whom the petition is addressed (council, carrier, Federal Government)
 - be short, clear and concise
 - provide printed name, area (usually address) and signature of objectors
 - have the statement to which signatories are agreeing on the top of each page
- If petitions are being left in different locations, it may be a good idea to include on the bottom of each sheet an address to which the petition sheets can be returned when complete.

Letters

- Form letters, which require people only to fill in their address and signature on prepared forms, are not highly effective in influencing the outcome of a decision.
- The most effective form of communication for this is the individually composed letter.
- Government authorities regard one letter as representing the views of about a hundred people.
- To encourage people to write letters, you can provide them with:
 - names and addresses
 - dot points to include in their correspondence.

Parliamentary questions

- Ask members of parliament – your local member, Greens, Independents etc – to ask relevant questions in parliament.
- Examples of relevant questions could include:
 - What is the policy of the Department of Education etc about the siting of mobile phone facilities near schools?
 - Does the relevant Department have insurance to cover it against class action in the event that EMR is proven to be a health risk?

Taking the message to Canberra

Sometimes a battle may be won at a local level but the war may still rage at a federal level. Where your concerns relate to federal or legislative issues, you can take the message to Canberra. To do this you can contact your local federal member, the Communications Minister and Shadow Communications Minister.

The names and contact details of these parliamentarians can be found at:

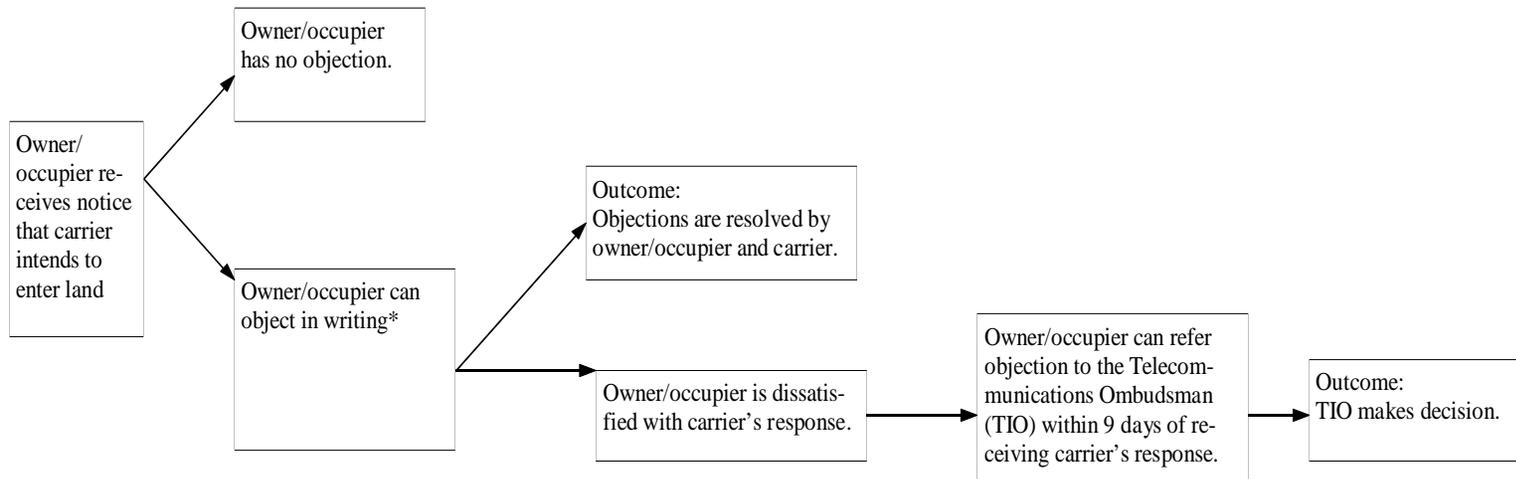
<http://australia.gov.au/directories/contact-parliament>

Carrier wants to enter your land

A carrier has the right to enter private land for these purposes:

- to inspect land
- to install a facility
- to maintain a facility.

The carrier must comply with various conditions when it does so and these are set out in the Telecommunications Code of Practice 1997.



*The Owner/occupier can object to the installation for the following reasons only:

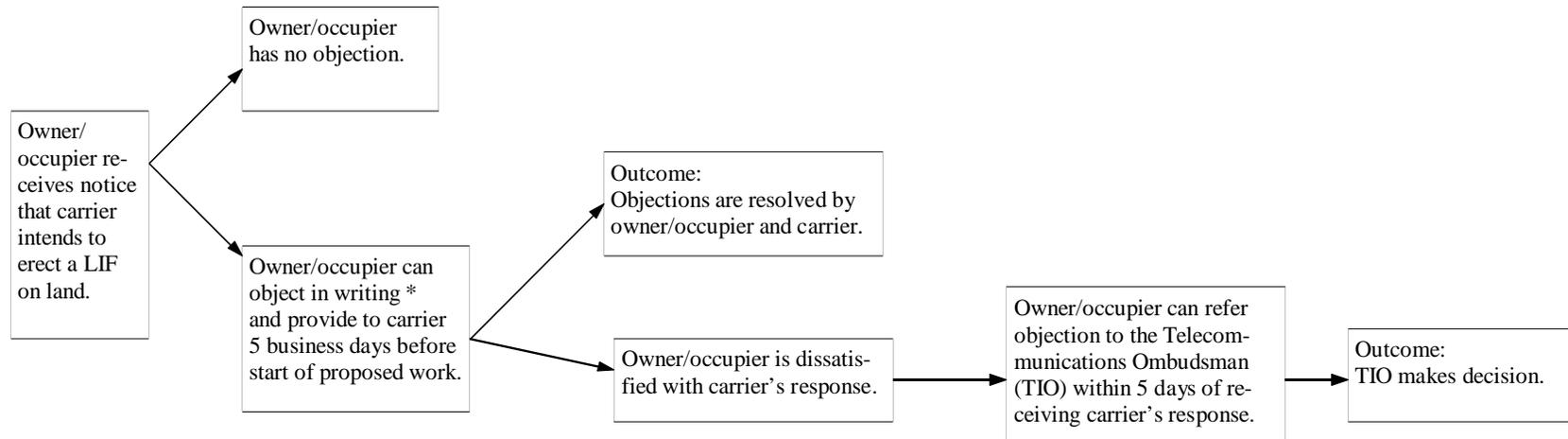
- “Using the objector’s land to engage in the activity;
- the location of a facility on the objector’s land;
- the date when the carrier proposes to start the activity, engage in it or stop it;
- the likely effect of the activity on the objector’s land;
- the carrier’s proposals to minimise detriment and inconvenience and to do as little damage as practicable, to the objector’s land.”

Reference:
Telecommunications
Code of Practice 1997,
Chapter 2, part 5.

Carrier wants to erect a low impact facility (LIF) on your land

A carrier has the right to enter private land to erect a low impact facility

The carrier must comply with various conditions when it does so and these are set out in the Telecommunications Code of Practice 1997.



*The Owner/occupier can object to the installation for the following reasons only:

- “Using the objector’s land to engage in the activity;
- the location of a facility on the objector’s land;
- the date when the carrier proposes to start the activity, engage in it or stop it;
- the likely effect of the activity on the objector’s land;
- the carrier’s proposals to minimise detriment and inconvenience and to do as little damage as practicable, to the objector’s land.”

Reference:
Telecommunications
Code of Practice 1997,
divisions 4 and 5.



*Living more safely with
electromagnetic radiation*

Resource Materials

The Australian Standard

In 2003 the then Australian Communications Authority (ACA) adopted a standard developed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA). It is the Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3 kHz to 300 GHz. It provides different limits for different frequencies.

The limits allowed by the ARPANSA standard are in line with international standards but are less stringent than those of the previous Australian standard, which would not have accommodated 3G mobile technology.

The ARPANSA standard covers all mobile phones and base stations as well as other RF transmitters. Below are approximate limits for some common mobile technology.

Technology	Frequency	limit
CDMA	800 MHz	400 $\mu\text{W}/\text{cm}^2$
GSM	900 MHz	450 $\mu\text{W}/\text{cm}^2$
GSM	1800 MHz	900 $\mu\text{W}/\text{cm}^2$
3G	1950 MHz	975 $\mu\text{W}/\text{cm}^2$

What the standard does

The standard protects against effects of EMR caused by:

- the electrical stimulation of nerves and muscles
- heating
- nuisance auditory effects.

Science has established that tissue is damaged when heated by RF radiation. The ARPANSA standard prevents the heating of tissue to a point where known damage can occur.

The standard states that it has been designed to incorporate safety factors.

What the standard does not do

The standard does not protect against effects not caused by heating (athermal effects) or long-term exposure.

There are now numerous studies showing adverse effects from EMR at levels of exposure too low to cause heating.

Some of the significant athermal effects that have been identified by scientists include the following.

- EMR has been shown to reduce melatonin (a free radical scavenger that protects against cancer)
- EMR has been shown to trigger a response by Heat Shock Proteins (HSPs). Chronic release of HSPs has been shown to cause cancer.
- EMR has been shown to breach the blood-brain barrier. This may lead to neurodegenerative diseases.
- EMR affects the process of calcium ion efflux. This affects the neurotransmitter GABA, melatonin, DNA synthesis, cell death, chromosome aberrations, gene transcription, protein expression, immune competence, regulation of the heart beat, cancer, reproductive and neurological effects.
- EMR is thought by some researchers to affect the body by way of *resonance*. This occurs

when the size of the wave is roughly the same as the size of an organ or cell.

Even though current legislation allows public exposures of up to $1000 \mu\text{W}/\text{cm}^2$ at levels associated with mobile phone technology, studies have found adverse effects at levels far below these. Some that have found adverse effects at $< 10 \mu\text{W}/\text{cm}^2$.

- $0.2\text{-}8 \mu\text{W}/\text{cm}^2$ – leukemia (Hocking, *Med J Aust*, 165(11-12):601-5,1996)
- $c 7 \mu\text{W}/\text{cm}^2$ – increases in leukemia and lymphoma, (Szmigielski, *Sci Total Environ*, 180(1):9-17, 1996)
- $1\text{-}2 \mu\text{W}/\text{cm}^2$ cancer, chromosome & blood cell changes, miscarriage, nervous system effects (Goldsmith, *Int J Occup Environ Health* 1(1):47-57, 1995)
- $c 0.5 \mu\text{W}/\text{cm}^2$ - increased rate of miscarriages (Ouellet-Hellstrom, *Am J Epidemiol* 138(10):775-86, 1993)
- $0.2 \mu\text{W}/\text{cm}^2$ - discomfort, irritability, appetite loss, fatigue, headache, difficulty in concentrating, and sleep disturbances (Navarro, *Biology and Medicine* 22(2&3):161-9, 2003)
- $0.0008\text{-}0.41 \mu\text{W}/\text{cm}^2$ - effects on memory, attention, reaction, endurance (Kolodynski *Sci Total Environ* 180:87-93,1996)

What about the rationale for the standard?

The standard is based on a number of assumptions that may or may not be accurate, for example:

- Heating effects of RF are the principle means of damaging tissue.
- Certain parts of the body can safely absorb 25 times as much radiation as others.
- It is appropriate to average the amount of radiation to which a person is exposed rather than consider peaks of exposure.

What countries are doing overseas

The Australian standard is in line with the guidelines of the International Commission for Non ionizing Radiation Protection.

Some countries have adopted lower standards.

- Switzerland has introduced limits that reduce exposure in sensitive areas to $4 \mu\text{W}/\text{cm}^2$, many times below international limits.
- Christchurch Council in New Zealand introduced a limit of $2 \mu\text{W}/\text{cm}^2$ which is $1/100^{\text{th}}$ of the country's standard.
- Russia has a limit of $10 \mu\text{W}/\text{cm}^2$ (but long averaging time of 8 hours means that high peaks could occur).
- Italy has stricter limits for public exposure but not occupational exposure.

RF Map

How much radiation exposure will result from the installation of a mobile phone antenna?

This is an important question for councils considering the approval of a new facility and for communities living nearby.

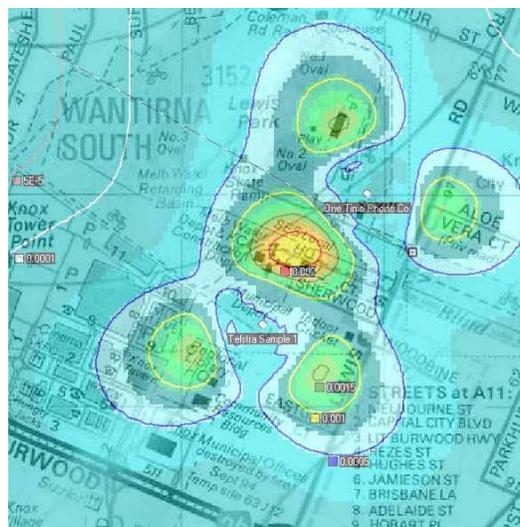
Telstra Research Laboratories has developed a software package that is able to calculate likely exposures from any proposed new facility. The RF-map software presents information in a graphic form that is easy to understand.

It can:

- calculate the exposures from single or multiple antennas;
- be overlaid on locality maps, thus showing the exposure in any given location;
- give graphics in plan and elevation;
- be used for mobile phone antennas and other technologies;
- present information in microwatts per square cm or as a percentage of the standard.

RF map predictions can be obtained from most carriers.

EMR Australia Pty Ltd recommends that councils request this information with each assessment and request exposure predictions in microwatts per square cm.



More information about RF map software is available from Mike Wood, Telstra's National EME Manager, 1300 368387 or <www.telstra.com.au/ememanagement/softwr.htm>.

Rights of carriers, councils, communities

Act	Carrier's rights	Council's rights	Community's rights
Telecommunications Act 1997, Schedule 3, part 1	enter land to assess, inspect, survey etc (Division 2)		
	install facilities with facility installation permit (Divison 3 clause 6(1)(a))		
	install low impact facilities (Division 3 clause 6(1)(b))		
	install temporary defence facilities (Division 3 clause 6 (1)(c))		
	maintain (alteration, removal, repair) facilities (Division 4)		
	engage in activities that do not comply with State and Territory Laws (Division 7)		
	enjoy protection from discriminatory state and territory laws (clause 44)		
			to compensation for financial loss or damage (clause 44)

Act	Carrier's rights	Council's rights	Community's rights
Telecommunications Code of Practice 1997			owners & occupiers to be notified about carrier's intention to enter land (2.23)
			owners & occupiers to object in writing to carrier's intention to enter land (2.29)
			owners & occupiers to be notified about installation of a LIF on their land (4.22)
			owners & occupiers to object to carrier's intention to engage in low impact activity on their land (4.30)
Mobile Phone Base Station Deployment Code		expect "reasonable assistance" from carriers in their forward planning. (3.1.1)	
			have access to carrier's written procedures for site selection (4.1.3)
		expect carrier to "have regard to" "relevant state and local government telecommunications planning policies" (4.1.5 e)	expect carrier to "have regard to" the objective of "minimization of EMR exposure to the public." (4.1.5 b)

Act	Carrier's rights	Council's rights	Community's rights
			expect carrier to "have regard to" the objective of "avoiding community sensitive locations". (4.1.5d)
		expect notification from carriers to affected councils about all <ul style="list-style-type: none"> • low RF power infrastructure and fixed radio links (5.1.1) • facilities that do not require DA (7.2.1) 	
			notification of occupiers of residences "in close proximity" of plans for installing low RF power and fixed radio links. (5.1.2)
			consultation about intended installation of facilities (6.3.5b) with 15 days to comment (6.5.6)
	to proceed with consultation after 5 business days whether or not council comments on consultation plan (6.5.4)	have 10 business days to comment on carrier's consultation plan for new sites (6.5.4)	
		obtain a copy of the carrier's report about the consultation process for new sites without DA (6.7.4a)	obtain a copy of the carrier's report about the consultation process when requested in writing for new sites without DA (6.7.4b)

Act	Carrier's rights	Council's rights	Community's rights
			obtain free from carrier information about "how they address RF EMR health and safety issues" and the location of reports on health and safety impacts of RF (10.2.1a)
			obtain free from carrier website information about a facility's: <ul style="list-style-type: none"> • infrastructure • alternate locations considered • key dates • ARPANSA EME report (6.4.5)
		obtain carrier's acknowledgement of a complaint within 10 working days (11.3.1)	obtain carrier's acknowledgement of a complaint within 10 working days (11.3.1)
		complain to ACMA about breaches of the Code (11.3.5)	complain to ACMA about breaches of the Code (11.3.5)

Relevant legal cases

Issue: low impact facility

Hurstville City Council v Hutchison 3G Australia Pty Ltd

Background

- Hutchison notified Hurstville Council, Sydney, of its intention to install a low impact facility on a council pole in Oatley Park in November 2002.
- The proposal was strongly opposed by Council and the community and Council removed the pole in question, planning to replace it with shorter poles.
- Hutchison constructed a new pole in place of the original, attached antennas and built an equipment shed.
- Council appealed to the NSW Land and Environment Court which dismissed the case.
- Council appealed to the NSW Court of Appeal.
- On July 8 the Court of Appeal found that Hutchison's facility was illegal and ordered it removed within ten days.
- Hutchison appealed to the High Court.
- On 3 October the High Court reaffirmed the decision of the Court of Appeal that the facility was illegal and ordered it removed within ten days.
- Hutchison removed the antennas on 4 October.

The argument

- Hutchison argued that its replacement of the original pole could be construed as "maintenance" under schedule 3 of the Telecommunications Act, 1997. This section of the Act allows carriers to enter land with or without owner approval for "maintenance" which includes "the alteration, removal or repair of the original facility".
- Council argued that the carrier required council consent for the erection of the new pole under the Environmental Planning and Assessment Act 1979 (NSW).

Implications for councils

- A carrier cannot erect a low impact facility on a pole it has erected in place of one less suitable for its infrastructure.
- A carrier cannot use the provision of "maintenance" under the Telecommunications Act to avoid its responsibilities for obtaining council approval *or* a facilities installation permit.

Relevant legal cases

Issue: low impact facility

Director of Housing v Hutchison 3G Australia Pty Ltd

Background

- Hutchison notified the Victorian Department of Planning of its intention to erect a low impact facility on the roof of a public housing block in St Kilda, Melbourne. The facility was to be comprised of 14 poles, six panel antennas and a parabolic antenna.
- The Victorian Director of Housing objected to the installation.
- Hutchison appealed to the Victorian Civil and Administrative Tribunal (VCAT) which found in its favour. The judge determined that all antennas fell within the specifications of the Telecommunications (Low-impact Facilities) Determination 1997.
- The Director of Housing appealed this decision in the Supreme Court of Victoria.
- On 27 August 2003 The Supreme Court of Victoria overturned the previous decision, finding that the construction did not comply with the Determination.

The argument

- Hutchison argued that each antenna considered individually complied with the specifications of the Telecommunications (Low-impact Facilities) Determination 1997.
- The Director of Housing argued that the proposal was a single facility that did not fall within the relevant items of the Determination.

Implications for councils

- Judge Balmford said that a “base station with antennas” is not low-impact as there is no item of this description in the LIF Determination and that each item, looked at separately, was not low-impact. This means that the fit out room and the poles, cables and equipment it contains are not low-impact.
- A carrier will need the owner’s approval before installing such equipment.

Note: The carrier has lodged an appeal against this decision in the Supreme Court of Victoria.

Relevant legal cases

Issue: health

Legal action by councils against carriers to prevent construction of facilities based on health grounds have not to date been successful. Below is a summary of some of these cases.

Shirley Primary School v Telecom Mobile Communications Limited and Christchurch City Council (New Zealand), 1998

- Christchurch City Council granted permission to the carrier to erect a base station next to Shirley Primary School.
- The School appealed the decision for the following reasons:
 - health risk from emissions
 - adverse psychological effects based on concern about risk to pupils and teachers
 - adverse visual effects
 - adverse impact on school enrolment.
- The court decided that risks were low and allowed the installation to proceed.

Telstra Corporation Ltd v Pine Rivers Shire Council & Ors, 2001

- Telstra applied to council to erect a base station.
- Council refused on the basis of:
 - amenity of locality
 - visual impact
 - health effects of radiation.
- Telstra appealed the decision and the appeal was upheld in the court. The court found there were no likely health effects of RFR and that a precautionary approach had been implemented. It considered residents' fears about RFR were unreasonable.

Vertical Telecoms Pty Ltd v Hornsby Shire Council, 2000

- Vertical applied to Council to install repeater antenna dishes for digital TV in Dural, Sydney.
- Council opposed the installation on a number of grounds, including visual amenity, health impacts and social impact caused by health concerns.
- Vertical appealed to the Land and Environment Court which upheld the appeal.
- Council and Vertical negotiated conditions of approval.

Relevant legal cases

Issue: indemnity

Hutchison 3G Australia Pty Ltd v Waverley Council

Background

- Hutchison applied to Waverley Council to install an additional facility on an existing tower in Bondi, Sydney, 2001. The tower already contained a large number of antennas and other facilities.
- Council resolved to approve the installation subject to the condition:
“that the applicant must agree in writing to release Council from all legal liabilities from risks incurred including any possible future adverse health impacts of electric magnetic radiation associated with the erection, maintenance and operation of this infrastructure.”
- Hutchison appealed against the condition in the Land and Environment Court.

Finding

- The court found in favour of the carrier. “... the Court determines that the indemnity condition is severable from the consent.” (2002)
- The council was ordered to pay the carrier’s costs.

Implication

- Councils cannot make approval conditional upon indemnity provided by carriers.

Legal judgments can be found at the website of the Australasian Legal Information Institute, www.austlii.edu.au.

Frequently asked questions

What is EMR?

Electromagnetic radiation (EMR) is the energy that radiates from any moving electrical current. It is comprised of both a magnetic and an electric field. Emissions from mobile phones and their antennas are in the radiofrequency (RF) band of the electromagnetic spectrum.

Doesn't EMR occur naturally in the environment?

EMR does occur naturally in the environment, for example in the form of light and the earth's magnetic field, and life on this planet has adapted to this natural form of energy. However, it is substantially different to the artificial electromagnetic radiation of electrical and communications technology.

It's been around for over a hundred years, so wouldn't any health problems have become obvious by now?

Artificial EMR differs from natural electromagnetic energy in a number of its characteristics, such as frequency and intensity. Artificial EMR has been in existence since the late 1800s, but has only been in widespread use since the mid to late 1900s, with mobile communications being a phenomenon of just the last few decades.

There is substantial research that suggests people experience adverse effects from exposure to high electrical fields and radiofrequency radiation from radar, TV, FM radio and, more recently, the telecommunications network.

Mobile phone antennas operate at very low power. Doesn't that mean they're safe?

While it's true that antennas do operate at very low power, that does not necessarily mean they are safe. Some scientific studies have found adverse effects at extremely low power and there is also evidence that effects are caused by *frequency* rather than *power*.

It complies with the standard, so isn't it safe?

The standard mandated by the ACMA protects primarily against the health problems that are known to occur when short-term exposures heat the body. However, it does not protect against other *athermal* (non-heating) effects that have been identified by research or against continuous, long-term exposure. Many studies have shown that people, animals or organisms exposed to levels of radiation that comply with the standard develop a range of unhealthy responses, including brain tumours.

It's a low impact facility so there's nothing council can do is there?

Even though council is not the consent authority for a low impact antenna, it can nevertheless influence the outcome of a proposal for a low impact antenna.

- It can have input into the carrier's community consultation plan for proposed facilities at a new site (CA Code 6.2.3).
- It can make suggestions to the carrier about proposed low impact facilities.

- It can request the carrier to comply with the provisions of the Model Telecommunications and Radiocommunications DCP – which establishes more stringent planning requirements for low impact facilities.

Doesn't the weight of international research show that there is no risk from EMR?

More studies have failed to show evidence of risk than have found evidence of risk.

However, when considering this statistic it is useful to bear in mind that:

- a large amount of research has been conducted or funded by the telecommunications industry
- effects have been shown to vary as a result of slight differences in subjects and exposures. This makes studies hard to replicate.

What about implementing buffer zones around schools?

While there have been many calls for no-tower zones around sensitive areas such as schools, such zones may not effectively reduce exposure. To achieve the same coverage, a base station outside a buffer zone may need to operate at higher power, thus exposing those nearby to higher levels of EMR. An alternative to buffer zones may be to consider, with the help of aids such as the RF map software, the best position for achieving reduced exposure for the community.

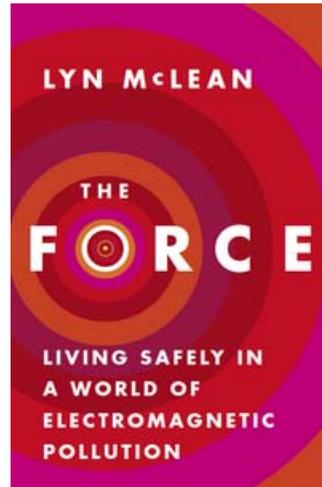
Contacts

Name	Address	Phone	Email	Web
Communications Alliance	Level 9, 32 Walker St North Sydney 2060	(02) 9959 9111	http://www.commsalliance.com.au/contact-us	http://www.commsalliance.com.au
ARPANSA	Lower Plenty Road Yallambie Vic 3065	(03) 9433 2211		www.arpansa.gov.au
Australian Communications & Media Authority	Purple Building, PO Box 78, Belconnen ACT 2616	02 6219 5555		www.acma.gov.au
Department of Broadband, Communications and the Digital Economy	GPO Box 2154 Canberra ACT 2601	1800 254 649 (free call) or 02 6271 1000		www.dbcde.gov.au
EMR Australia PL	PO Box 347 Sylvania Southgate	(02) 9576 1772	http://www.emraustralia.com.au/ContactUs.htm	www.emraustralia.com.au
Mobile Carriers Forum (MCF)	PO Box 4309 Manuka ACT 2603	02 6295 8191	contact@mcf.amta.org.au	http://www.mcf.amta.org.au/
Telecommunications Industry Ombudsman (TIO)	PO Box 276 Collins St West Melbourne Vic 8007	1800 062 058		www.tio.com.au

Useful terms and abbreviations

ACA	Australian Communications and Media Authority – telecommunications regulator (formerly Australian Communications Authority).
CA	Communications Alliance (formerly the Australian Communications Industry Forum) an industry-funded body that makes codes
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency (An agency of the Federal Dept of Health)
EMR	electromagnetic radiation
DA	Development application (applications to council that require council's consent)
RF	radiofrequency Emissions from mobile phones and base stations are in the RF band of the electromagnetic spectrum.
Emissions	The radiation that is emitted by a facility. This is different to exposures.
Exposures	The amount of radiation <i>received</i> by a person in a given location. It will vary according to distance from the facility.

More Information



How safe are mobile phone towers?

In ‘The Force,’ by Lyn McLean, Director of EMR Australia, you’ll read:

- scientific evidence on the effects of phone tower radiation;
- ‘safe’ levels of exposure radiofrequency radiation;
- how other countries are protecting the public;
- about electromagnetic fields from powerlines, wiring and appliances;
- how to reduce exposure to from mobile and cordless phones, computers, household appliances;
- how to design and build for a low-radiation environment.

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