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## 1 GENERAL

### 1.1 Introduction

1. This chapter of the DCP applies to the construction of telecommunications and radiocommunications infrastructure (including broadcasting infrastructure covered by the Telecommunications Act 1997 and the Radiocommunications Act 1992).
2. Telecommunications and radiocommunications facilities include telecommunications towers, masts and antennas, base stations, satellite-based facilities, radiocommunications transmitters and their supporting infrastructure and ancillary development.
3. New telecommunications and radiocommunications infrastructure requires Council consent unless it is exempted by legislation such as the Commonwealth Telecommunications (Low Impact) Determination 1997 or is classified as exempt or complying development in Council's LEP applying to the subject site..
4. This chapter of the DCP relates to the development of telecommunications and radiocommunications infrastructure that are not low-impact facilities (including broadcasting infrastructure covered under the Commonwealth Telecommunications Act 1997 and the Commonwealth Radiocommunications Act 1992). These facilities require development consent.
5. Low-impact facilities as described in the Commonwealth Telecommunications (Low-impact Facilities) Determination 1997 (see Appendix 1 of the policy) are exempted from State and Territory planning and environmental laws and therefore do not require Council's development consent, except low impact facilities that are proposed within a Heritage Conservation Area. However, as part of a carrier's consultation obligations, Council requires a written submission demonstrating compliance with the relevant sections of the Australian Communications Industry Forum (ACIF) Code and the objectives and guidelines contained in this chapter of the DCP prior to their installation. A fact sheet for infrastructure providers wishing to install a low-impact facility can be found in Appendix 2 of this chapter.
6. This policy does **not** apply to:
  - (a) Cabling;
  - (b) Antennae, aerials, microwave antennae and satellite dishes covered as "Exempt Development" under the relevant LEP applying to the site, or
  - (c) Temporary emergency services.

### 1.2 Definitions

The meanings of the following terms used in this policy, are included here for clarification only and do not replace the definitions contained within the legislation.

<b>Co-location</b>	The practice of locating a number of different communications facilities, often owned by different carriers, on one facility or structure.
<b>Community sensitive locations</b>	<p>These may include areas:</p> <ul style="list-style-type: none"> <li>• Where occupants are located for long periods of time, for instance residences;</li> <li>• That are frequented by children, for instance schools, child care</li> </ul>

	centres;
	<ul style="list-style-type: none"> <li>• Where there are people with particular health concerns for instance hospitals, aged care centres; and</li> <li>• Considered significant to indigenous communities.</li> </ul>
<b>Cumulative impact</b>	The sum of the impacts from a number of different sources or over time.
<b>Electromagnetic radiation (EMR) or electromagnetic energy (EME)</b>	The radiation in the microwave and radiofrequency band of the electromagnetic spectrum.
<b>Low-impact facility</b>	A facility that is exempted from state and council local planning laws under the Telecommunications (Low-impact Facilities) Determination 1997.
<b>Radiocommunications facility</b>	A base station or radiocommunications link, satellite-based facility or radiocommunications transmitter.
<b>Telecommunications facility</b>	Any part of the infrastructure of a telecommunications network. It includes any telecommunications line, equipment, apparatus, telecommunications tower, mast, antenna, tunnel, duct, hole, pit, pole or other structure or thing used, or for use in connection with a telecommunications network.
<b>Telecommunications network</b>	A system, or series of systems, that carries, or is capable of carrying, communications by means of guided and/or unguided electromagnetic radiation.

## 1.3 Objectives

1. The objectives of this chapter of the DCP are:
  - (a) To ensure telecommunications and radio-communications facilities are designed to minimise the public's exposure to electromagnetic radiation (EMR) and are restricted to locations where EMR levels are consistent with or below the nationally adopted exposure threshold criteria;
  - (c) To ensure telecommunications and radiocommunications infrastructure adopt principles of good urban design;
  - (d) To ensure telecommunications and radio-communications infrastructure is visually compatible with surrounding development in the locality and any heritage buildings or Heritage Conservation Areas; and
  - (e) To minimise any potential significant adverse amenity impacts upon the locality.

## 1.4 Relevant Legislation and Industry Codes of Practice

### 1.4.1 Telecommunications Act 1997

1. The Commonwealth Telecommunications Act 1997 establishes a regime for carriers' rights and responsibilities when inspecting, maintaining or installing telecommunications facilities.

2. This policy clarifies the expectations of Council on carriers who operate under the Act.

#### **1.4.2 Radiocommunications Act 1992**

1. The Radiocommunications Act 1992 regulates radiocommunications transmitters. It provides for the licensing of radiocommunications equipment and applies mandatory standards to its use.
2. This policy clarifies the expectations of Council on carriers who operate under the Act

#### **1.4.3 Telecommunications Code of Practice 1997**

1. The Telecommunications Code of Practice 1997 establishes obligations on carriers in land-access situations such as when inspecting land, installing low-impact facilities and maintaining facilities. It also requires carriers to comply with recognised industry codes and standards.
2. This policy clarifies and standardises the expectations of Council in respect to land-access situations.

#### **1.4.4 Telecommunications (Low-impact) Facilities Determination 1997 (see Appendix 1)**

1. The Telecommunications (Low-impact) Facilities Determination 1997 exempts telecommunications infrastructure classified as “low-impact” from compliance with state and local government regulations. This classification relates primarily to visual appearance and size, rather than emissions.
2. This policy applies to facilities that are not low-impact facilities. While the policy does not have the authority to override the Telecommunications (Low-impact) Facilities Determination 1997, it nevertheless provides advice to carriers about the expectations of Council and requests their voluntary co-operation.

#### **1.4.5 Industry Code for the Deployment of Mobile Phone Network Infrastructure (see Appendix 3)**

1. The Industry Code for the Deployment of Mobile Phone Network Infrastructure (Australian Communications Industry Forum 2004) derives its authority from the Telecommunications Act 1997 and applies only to telecommunications carriers and their infrastructure. It does not apply to other broadcasters, councils or other agencies. It requires carriers to apply a precautionary approach to site selection and the design and operation of infrastructure; to consult with councils and communities regarding siting; to provide information to the public and to implement a complaints handling procedure. It applies to both low impact and not low-impact facilities.
2. This policy broadens the scope of the Australian Communications Industry Forum’s Code by applying consistently not only to carriers and their agents, but also to builders and operators of all electromagnetic radiation emitting infrastructure, including those operating under the Radiocommunications Act 1992.

## **2 SITING GUIDELINES**

### **2.1 Visual Amenity**

1. Carriers are to design antennas and supporting infrastructure in such a way as to minimise or reduce the visual and cumulative visual impact from the public domain and adjacent areas.

2. Infrastructure design must be consistent with the character of the surrounding area.
3. Within the local context, the infrastructure design must take account of:
  - Colour;
  - Texture;
  - Form;
  - Bulk and scale.
4. Infrastructure must:
  - Be well-designed;
  - Be integrated with the existing building structure unless otherwise justified in writing to Council;
  - Have concealed cables where practical and appropriate; and
  - Be unobtrusive where possible.
5. Wherever technically feasible, antennas and mast structures should either not be visible, or should be as visually unobtrusive as possible, from the fronting road at pedestrian eye level. Wherever technically feasible they should be located to minimise their obtrusiveness. This may for instance result in infrastructure being located towards the rear of a building roof top.
6. Wherever possible, towers should be of 'slimline monopole' construction.

Note: A discussion on facility design can be found in the Mobile Carriers Forum's *Guidelines for Better Visual Outcomes – Low-impact Mobile Facilities* that can be accessed at [www.mcf.amta.org.au](http://www.mcf.amta.org.au).
7. The site must be restored following construction of the infrastructure.
8. Infrastructure must be removed when no longer being used.

## 2.2 Co-location

1. Co-location is the practice of locating a number of different telecommunication facilities often owned by different carriers on one (1) facility or structure.
2. Co-location may reduce the cumulative visual impact of a number of different facilities in an area.
3. Co-location may, however not always be a desirable option where:
  - Adding additional antennas increases emissions;
  - It may be visually unacceptable;
  - There are physical and technical limits to the amount of infrastructure that structures are able to support; or
  - The required coverage cannot be achieved from the location.
4. Carriers should demonstrate a precautionary approach and account for the principles of ecologically sustainable development in determining effective measures to minimise the negative impacts of co-location.

## 2.3 Location

1. The applicant should demonstrate that, in selecting a site, it has adopted a precautionary approach and accounted for the principles of ecologically sustainable development in regards to minimising EMR exposures consistent with the Code for the Deployment of Mobile Phone Network Infrastructure Australian Communications Industry Forum 2004).

Preferred land uses include:

- Industrial areas;
  - Rural areas; and
  - Low-use open space.
2. The applicant should demonstrate particular consideration of likely community sensitive locations. Community sensitive locations may include areas:
    - Where occupants are located for long periods of time (eg residences);
    - That are frequented by children (eg schools, child care centres); and
    - Where there are people with particular health concerns (eg hospitals, aged care centres).
  3. A facility should not be located in an area where in the opinion of Council the landform, vegetation or features of a proposed location have special aesthetic, architectural, ecological or conservational value, or where such features will not adequately screen or reduce the impact of the facility.

## 2.4 Heritage

1. The applicant is to have regard to avoiding or minimising the visual impact of any proposed facility on the heritage significance of any adjoining or nearby heritage item and / or contributory items within a Heritage Conservation Area.
2. Where a facility is proposed upon land containing an item of environmental heritage or land within a Heritage Conservation Area, a heritage impact assessment report will be required.
3. A facility should not be located in a locality where in the opinion of Council the streetscape is dominated by heritage buildings or the heritage significance of adjoining or nearby items of environmental heritage and / or Heritage Conservation Areas may be adversely impacted upon.
4. A facility should not be located on roof tops where the building is an item of environmental heritage item or is located within a Heritage Conservation Area as identified in Wollongong LEP 2009.

## 2.5 Facility physical design controls

1. Infrastructure must be of high quality design and construction.
2. Proposals should consider the range of available alternate infrastructure including new technologies, to minimise unnecessary or incidental EMR emissions and exposures.

The plan for the facility must include measures to restrict public access to the antenna(s). Approaches to the antenna(s) must contain appropriate signs warning of EMR and provide contact details for the owner and / or site manager of the facility.



## 2.6 Facility health controls

1. Documentary evidence is required which proves that the proposed facility complies with the relevant Australian exposure standard as specified by the Australian Communications and Media Authority.

**Note:** The current Australian Standard as specified by the Australian Communications and Media Authority is Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), 2002, 'Radiation Protection Standard - Maximum Exposure Levels to Radiofrequency Fields - 3kHz to 300GHz', Radiation Protection Series Publication No. 3, ARPANSA, Yallambie Australia available from <http://www.arpansa.gov.au>.

2. Development Applications in community sensitive locations and that are within 300 metres of existing not low-impact type facilities licensed by the Australian Communications and Media Authority are to be accompanied by an EMR assessment in accordance with the ARPANSA prediction methodology and report format demonstrating that the development is not subject to exposure standards above that specified by the Australian Communications and Media Authority.
3. The Development Application must also be supported with a map which analyses the cumulative effect of the proposal and shows the proposal's EMR levels, bearing in mind the relevant Australian exposure standard.
4. The choice of site should also take into account likely future adjoining land uses.
5. In determining the above criteria (sections 2.1 to 2.7 inclusive), the applicant must undertake a site/locality analysis according to the application lodgement checklist (see Appendix 4).

## 3 DEVELOPMENT APPLICATION INFORMATION REQUIREMENTS

1. The following information is required to be submitted with a Development Application is to include the information requested on the application lodgement checklist (see Appendix 4), including the following:
  - (a) Statement of Environmental Effects (see Appendix 5 for information to be included);
  - (b) Site/locality analysis plan;
  - (c) Site plan;
  - (d) Elevation plan;
  - (e) Photomontage of the proposed facility in context of the location;
  - (f) Landscape concept plan (if a stand alone facility);
  - (g) An EMR assessment report in accordance with the Australian Radiation Protection and Nuclear Safety Agency's (ARPANSA's) prediction methodology and report format (see Appendices 6 and 7);
  - (h) A 360° prediction map of exposure levels at 1.5 metres above publicly accessible surfaces for a proposed facility within 300 metres of a likely community sensitive location, or for other sites upon request; and
  - (i) Certification from a suitably qualified and practising professional that the exposure details contained in the EMR assessment report / application are true and accurate.



2. A heritage impact assessment report will be required if the proposed telecommunications or radio-communications facility is in the vicinity of heritage items or Heritage Conservation Areas).

## **Appendix: 1**

### **LOW-IMPACT FACILITIES DETERMINATION**

Available from <http://www.comlaw.gov.au>

## Appendix: 2

### LOW-IMPACT FACILITIES FACT SHEET

#### Low-impact Telecommunications Facilities

##### *What are Low-impact Telecommunications Facilities?*

1. Low-impact facilities are described in the Commonwealth *Telecommunications (Low-impact Facilities) Determination 1997*. The description of low-impact facilities relates mainly to visual appearance and size. As a result of the Determination, low-impact facilities are exempted from State and Territory planning and environmental laws. Council's development consent is therefore not required to install a new low-impact facility.
2. Low-impact facilities include many mobile telephone base stations. The Australian Communications Industry Forum (ACIF) has produced a Code for the Deployment of Mobile Phone Network Infrastructure that aims to address community concerns about the placement of mobile phone base stations and allow the community and councils greater participation in decisions made by telecommunications carriers.
3. As well, to assist in the design of low-impact facilities, the Mobile Carriers Forum has produced the document *Guidelines for Better Visual Outcomes - Low-impact Mobile Facilities*.
4. Telecommunications carriers should also consider the objectives and guidelines contained in Council's DCP prior to installing a low-impact facility.

##### *Notifying Council*

5. Under the ACIF Code, telecommunication carriers are to notify councils of their intention to install a low-impact facility. Carriers should submit to Council a draft Low-Impact Determination Report with the following details:
  - Site plan (1:100 and/or 1:200 minimum scale)
    - Dimensions of site and compound
    - Existing contour lines fixed to Australian Height Datum
    - Location of existing structures
    - Existing vegetation (including location, height and species)
    - Identification of any vegetation to be removed as part of the proposal
    - Vehicular access
    - North point
    - Locations of easements, rights-of-way, power poles, substations
  - Elevations (1:100 and/or 1:200 minimum scale)
    - Front, side, rear elevations
    - Photomontage of the proposed facility in context of the location
    - External materials and finishes including details of colours
    - Identification of all components

- Locality analysis plan (1:10 000 maximum scale)
  - Identify site
  - Location of nearby buildings, heights, uses
  - Location of community sensitive land uses including residential areas, childcare centres, schools, aged care centres, hospitals and regional icons within a 300 metre radius of the proposal
  - Built form and character of surrounds
  - Other significant features
  - Views to and from the proposed site
  - Location of nearest alternative site/s
- Written Statement
  - Applicant's existing facilities
  - Purpose and need for the proposed facility
  - Geographical area to be serviced
  - Nature of the proposed facility
  - Alternative sites considered, including any opportunities for co-location
  - Rationale for deciding that the proposal is indeed a low-impact facility
  - Detailed description of the site including any topographical features and constraints
- Details of vegetation on the site including location, height and species and whether any vegetation is to be removed in conjunction with the proposed development
  - Details of existing development on the site including number and type of structures
  - Details of the availability of servicing
  - Measures to minimise the visual impact from the public domain with regard to bulk and scale, form, compatibility with the surrounding area, external materials, texture and colours
  - Measures to minimise or reduce the cumulative visual impact from the public domain
  - Proposed landscaping including details of species, likely height
  - Measures to minimise impact on flora and fauna
- Proposed method of stormwater drainage
  - Details of any expected emissions other than electromagnetic radiation
  - Measures to minimise the impact on the environment during installation or construction including:
    - Minimising cut and fill
    - Method of soil and water management
    - Method of waste minimisation including type/quantity of waste, disposal and recycling opportunities
    - Noise control
    - Traffic control

- Restoration of the site following construction
- Measures proposed to minimise public exposure to electromagnetic radiation
- If the facility is to be co-located, measures to minimise the cumulative emissions of electromagnetic radiation
- Measures to restrict public access to the facility
- Details of proposed publicly visible, permanent and legible weatherproof signage in the immediate proximity of the facility that identifies the name and contact details of the owner or site manager (consistent with the ACIF Code)
- Intentions for removal when the facility becomes redundant
- Proposed consultation strategy (to include consideration of communication with those that communicate in languages other than English)
- An EMR assessment in accordance with the Australian Radiation Protection and Nuclear Safety Agency's prediction methodology and report format as described in the ACIF Code if within 300m of a site listed as a likely community sensitive location at 5.1.4(c) in the ACIF Code
- A 360° prediction map of exposure levels at 1.5 m above publicly accessible surfaces within 300m and listed as a likely community sensitive location at 5.1.4(c) in the ACIF Code
- Certification from a suitably qualified and practising professional that exposure details contained in the application are true and accurate

### *Community consultation*

6. The carrier is to consult with the community that will be affected by the proposed facility, irrespective of Council boundaries, as required by the ACIF Code. Consultation must be commensurate with the anticipated impact of the facility. The applicant must make reasonable endeavours to conduct consultation in such a way that local non-english speaking communities are informed about the proposal and are able to comment on it. For each facility, a sign must be erected notifying the intention of the carrier to erect infrastructure on site and providing the name and contact details of the carrier, consistent with the ACIF code.
7. Following the community consultation, the carrier must provide Council with the results and a final Low Impact Determination Report that addresses any community concerns.

## **Appendix: 3**

### **ACIF INDUSTRY CODE FOR THE DEPLOYMENT OF MOBILE PHONE NETWORK INFRASTRUCTURE**

Available at: [http:// www.commsalliance.com.au](http://www.commsalliance.com.au)

## Appendix: 4

### APPLICATION STATEMENT OF ENVIRONMENTAL EFFECTS CHECKLIST

- Applicant's existing facilities
- Purpose and need for the proposed facility
- Geographical area to be serviced
- Nature of the proposed facility
- Alternative sites considered, including any opportunities for co-location
- Detailed description of the site including any topographical features and constraints such as easements, flooding, filling, instability, contamination, bushfire hazard etc. Confirmation of the manner in which such site constraints may be overcome.
- Details of vegetation on the site including location, height and species and whether any vegetation is to be removed in conjunction with the proposed development
- Details of existing development on the site including number and type of structures and their heritage significance, if applicable. Confirmation of whether any structures are to be demolished (to be accompanied by a Demolition Work Plan, available from Council)
- Details of the availability of servicing
- Measures to minimise the visual impact from the public domain with regard to bulk and scale, form, compatibility with the surrounding area, external materials, texture and colours
- Measures to minimise or reduce the cumulative visual impact from the public domain
- Proposed landscaping including details of species, likely height and spread
- Measures to minimise impact on flora and fauna
- Proposed method of stormwater drainage
- Details of any expected emissions other than electromagnetic radiation
- Measures to minimise the impact on the environment during installation or construction including:
  - Minimising cut and fill
  - Method of soil and water management
  - Method of waste minimisation including type/quantity of waste, disposal and recycling opportunities
  - Noise control



- Traffic control
  - Restoration of the site following construction
- 
- Measures proposed to minimise public exposure to EMR
  - Measures to restrict public access to the facility
  - Details of proposed publicly visible, permanent and legible weatherproof signage in the immediate proximity of the facility that identifies the name and contact details of the owner or site manager
  - Compliance with the Building Code of Australia and other relevant Australian Standards
  - Intentions for removal when the facility becomes redundant

## **Appendix: 5**

### **ARPANSA TECHNICAL REPORT ON RADIO FREQUENCY EME EXPOSURE LEVELS – PREDICTION METHODOLOGIES**

Obtainable from <http://www.arpansa.gov.au>

## **Appendix: 6**

### **ARPANSA TEMPLATE FOR ENVIRONMENTAL EME REPORTS**

Obtainable from <http://www.arpansa.gov.au>

## Appendix: 7

### POLICY COMPLIANCE CHECKLIST

1. Visual amenity	Yes	No	NA
Has the proposed facility been designed so as to minimise visual impact from the public domain?			
Does the design minimise or reduce the cumulative visual impact from the public domain?			
Does the design take account of			
(a) Colour;			
(b) Texture;			
(c) Form;			
(d) Bulk and scale?			
Is the proposed infrastructure:			
(e) Well designed;			
(f) Integrated with the existing building structure;			
(g) Incorporating concealed cables;			
(h) Integrating the shelters with building structure;			
(i) Unobtrusive as possible;			
(j) Consistent with the character of the surrounding area?			
Is the proposed infrastructure:			
(k) Well designed;			
(l) Integrated with the existing building structure;			
(m) Incorporating concealed cables;			
(n) Integrating the shelters with building structure;			
(o) Unobtrusive as possible;			
(p) Consistent with the character of the surrounding area?			
For any proposed tower(s), has 'slimline monopole' construction been considered?			
Does the proposal include restoration or enhancement of the site following construction of the infrastructure?			

Does the proposal include removal of the infrastructure when it is redundant?

## 2. Co-location

Does the proposed facility require co-location? If so,

Does it minimise cumulative emissions for neighbouring residents or other sensitive land uses?

Does it result in an unacceptable visual impact?

## 3. Location

Has the applicant demonstrated that, in selecting a site, it has adopted a precautionary approach in regards to minimising EMR exposures?

Is the proposed facility in a preferred land use area?

If the proposed facility is in an area containing community sensitive locations, has it considered s. 5.1.4 of the ACIF's Industry Code for the Deployment of Mobile Phone Network Infrastructure?