



Department of  
Planning



# DRAFT STATE PLANNING POLICY

## 5.2

### Telecommunications Infrastructure

October 2014

*Prepared under Part Three of the Planning  
and Development Act 2005 by the Western  
Australian Planning Commission*



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## 1. CITATION

This is a State Planning Policy prepared under Part Three of the *Planning and Development Act 2005*. It may be cited as State Planning Policy 5.2: Telecommunications Infrastructure (SPP 5.2).

## 2. OBJECTIVES

The objectives of this Policy are to:

- facilitate the provision of telecommunications infrastructure in an efficient, cost-effective and environmentally responsible manner to adequately and effectively meet community needs;
- manage the aesthetic and community impacts of telecommunications infrastructure;
- ensure that telecommunications infrastructure is included in relevant future structure planning as essential infrastructure; and
- promote a consistent approach in the preparation, assessment and determination of development applications for telecommunications infrastructure.

## 3. APPLICATION

This Policy applies to the planning, zoning, subdivision and development of land throughout Western Australia in respect of all telecommunications infrastructure other than those facilities exempted under the Commonwealth *Telecommunications Act 1997* (Telecommunications Act). The *Telecommunications Act* exempts installation of specified telecommunications facilities from complying with State (and local) planning approval procedures.

Exempt installations include those listed in Section 4.4. This Policy applies to all telecommunications infrastructure except that exempted by the *Telecommunications (Low-Impact Facilities) Determination 1997*. This policy focusses primarily on mobile telecommunications infrastructure. Upon gazettal of this policy, *Statement of Planning Policy 5.2 Telecommunications Infrastructure (2004)* will be repealed.

## 4. BACKGROUND

### 4.1 Telecommunications Services

Adequate, reliable and competitive telecommunications form an essential service that is necessary for all aspects of community life, from supporting the State's economy and businesses to creating connected and cohesive social networks. Growing consumer demand serves to strengthen this need. Emergency services are also becoming increasingly reliant on the wireless telecommunications network.

The importance of telecommunications services in Western Australia is recognised in the Western Australian Planning Commission's *State Planning Strategy 2050* (2014), which advocates for the provision of an effective state-wide telecommunications network.

Installation of telecommunications network infrastructure usually involves the development of land and/or alteration to the appearance of buildings or structures, which may have visual impacts. This planning policy aims to balance the need for effective telecommunications services and effective roll-out of networks, with the community interest in protecting the visual character of local areas.

### 4.2 Mobile telephone networks

Mobile telephone networks operate through base stations, which incorporate a radio transmitter, a receiver and an antenna. Base stations provide coverage to a geographic area known as a 'cell', which may vary in size but generally has a radius of between 0.5 (or less) and 10 kilometres. Each cell has its own transceiver which sends and receives radio signals throughout its specified zone.

The location of new mobile telephone base stations needs to be carefully considered, particularly with respect to the relationship of the base stations with each other to ensure the network functions effectively. Mobile telephone antennas generally need to be mounted clear of surrounding obstructions like trees and buildings to avoid loss of reception and to allow the mobile telephone base station to cover its intended cell with minimum transmitter power. They must also be sited where they will not interfere with neighbouring cells. The more base stations of a particular carrier there are in an area, the smaller the cells, which means the power and energy levels of each are generally lower. In areas of high mobile use, where there are many small cells to meet traffic demands, antennas do not need to be very high and can be installed on building roofs or small poles. In low-usage areas the cells are larger and the antennas are mounted on taller masts and towers.

In areas of rising mobile communications service demand, the number of cells needed to maintain service quality and capacity will also increase. Often this means one or more additional base stations are needed (whether through additional panels to existing towers or new towers), even in areas where mobile network coverage already exists.

As telecommunications networks expand from increasing demand for mobile telephone and data services, the location, siting and aesthetics of proposed facilities can become an issue of debate in local communities, particularly residential neighbourhoods.

### 4.3 Environmental radiofrequency

The use of mobile telephones has raised public interest about possible health issues associated with exposure to electromagnetic emissions. Telecommunications carriers are required to comply with the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) (Electromagnetic Radiation - Human Exposure) Standard (2003) (Standard). Standards set by ARPANSA incorporate substantial safety margins to address human health and safety matters. Therefore this policy does not deal with health and safety matters.

Research<sup>1</sup> undertaken by ARPANSA demonstrates that environmental radiofrequency levels near base stations for the mobile telephone network are extremely low. The ARPANSA study reported that the highest daily average level was well below one per cent of the Standard's public exposure limits and concluded that *"given the very low levels recorded and the relatively low power of these types of transmitters, it is unlikely that the radiofrequency radiation from base stations would cause any adverse health effects, based on current medical research"*.

Based on ARPANSA's findings, local planning authorities should not set additional setbacks for

<sup>1</sup> ARPANSA fact sheet EME Series No. 9 'What about base stations and communication towers- are there any health effects?' [www.arpansa.gov.au/pubs/eme/fact9.pdf](http://www.arpansa.gov.au/pubs/eme/fact9.pdf)

telecommunications infrastructure in local planning schemes or local planning policies for the purposes of health or safety standards for human exposure to electromagnetic radiation.

### 4.4 Visual amenity

The planning authority may exercise discretion in its treatment of the visual amenity impacts of telecommunications infrastructure. If visual amenity setbacks are to be put in place, they should be no greater than the height of the tower to the lot boundary. The planning authority may choose to apply no setback in instances where it considers that the siting of infrastructure does not have a negative impact on existing visual amenity.

### 4.5 Planning for telecommunications infrastructure

The *Telecommunications Act 1997* requires that the installation of telecommunications facilities, apart from specified facilities and activities, must comply with State planning and environmental legislation. This means that unless exempted by legislation or a planning scheme, telecommunications facilities in Western Australia require planning approval prior to installation.

Exemptions under the *Telecommunications Act* include:

- a low-impact facility described in the Telecommunications (Low-Impact Facilities) Determination 1997<sup>2</sup> (the Determination) and all existing and future amendments to the Determination, when installed by a carrier;

- inspection and maintenance;
- a temporary defence facility; and
- a facility authorised by a Facilities Installation Permit issued under the *Telecommunications Act*.

For a complete list of exempted low impact facilities applicants should refer to the latest reprint of the *Telecommunications Act*<sup>3</sup>.

All other facilities constitute 'development' under the *Planning and Development Act 2005* and planning approval may be required from the relevant planning authority before development starts. Proponents are advised to check the terms of the local planning scheme for which their development is relevant. Separate approval may also be required from other government agencies under other legislation.

<sup>2</sup> [www.comlaw.gov.au/Details/F2012C00177](http://www.comlaw.gov.au/Details/F2012C00177)

<sup>3</sup> Under the Determination, certain sized facilities in specific zones are considered low-impact. For example, a radio communications dish is defined by the Determination as low impact in a residential or commercial zone if it is not more than 1.2 metres in diameter and is colour-matched to its background or is of a colour agreed to in writing by the carrier and the relevant local government, whereas a radio communications dish in an industrial or rural area is defined as low impact if it is not more than 1.8 metres in diameter and is colour-matched to its background or is of a colour agreed to. The Determination also specifies that no facilities are low impact in "an area of environmental significance".

## 5. POLICY PROVISIONS

### 5.1 Guiding principles for local planning schemes, policies, strategies and structure plans

Telecommunications infrastructure should only be included as a relevant planning consideration in local planning schemes, policies, strategies and structure plans in accordance with the following guiding principles:

- Where possible, consideration is to be given to the identification of telecommunications infrastructure sites for inclusion in relevant future structure planning (local scale at a minimum), preferably with potential for co-location with other utility providers (eg power, road, rail)
- For local planning schemes:
  - telecommunications infrastructure should be included as a specific use in use class tables;
  - local governments should consider exempting defined types of proposals in non-sensitive areas from planning approval, using areas adjacent to residential land uses such as industrial, commercial, business and rural areas, to provide maximum network coverage;
  - the requirement for advertising of proposals for telecommunications infrastructure is at the discretion of local government. Where it is considered necessary, notice should be given to surrounding land owners located up to a maximum of 200m of the proposed infrastructure. There may be some exceptional circumstances that may require broader consultation coverage.

- In the case that local policies are inconsistent with this Policy, all provisions in this Policy will prevail.

### 5.2 Guiding principles for the location, siting and design of telecommunications infrastructure

Telecommunications infrastructure should be located, sited and designed in accordance with the following guiding principles:

- Telecommunications infrastructure should be located to facilitate continuous network coverage as far as practically possible
- Telecommunications facilities should be designed and sited so they do not unduly compromise local heritage, aesthetic or conservation values
- Telecommunications cables should be placed underground, wherever practical
- The design and siting of telecommunications towers and ancillary facilities should be integrated with existing buildings and structures wherever practical to minimise adverse visual impact on the surrounding area using concealment, colour coordination, camouflage and landscaping
- Wherever possible, telecommunications infrastructure should be co-located with existing infrastructure and/or within existing infrastructure corridors
- If visual amenity setbacks from lot boundaries are to be put in place, they should be no greater than the height of the tower.

### 5.3 Matters to be considered when determining development applications

When considering an application for telecommunications infrastructure, the relevant approval authority should only have regard for:

- the extent to which co-location opportunities are available and have been investigated on suitable nearby existing structures;
- the need to ensure continuity of supply of telecommunications services in the local area or region and the degree to which the proposal will improve network coverage, reliability, capacity and service quality to users;
- providing emergency services coverage and the need to eliminate areas of no network coverage (black-spots);
- the proposal's local environmental, heritage and aesthetic impacts;
- documentation required to be submitted under Section 5.4 of this Policy; and
- extent to which the proposal adheres to the Guiding principles for the location, siting and design of telecommunications infrastructure set out in Section 5.2 of this Policy.

#### 5.4 Information required to be submitted when lodging a development application

In addition to the requirements for development applications under the relevant local planning scheme, applications for planning approval of telecommunications infrastructure are to include the following information:

- a report demonstrating compliance with the Mobile Phone Base Station Deployment Industry Code (C564:2011). This report is to demonstrate that the carrier accepts full responsibility for compliance with the *Radiocommunications Act 1992*;
  - a statement about the extent to which the proposed facility addresses the network capacity for future demand and/or current gaps in service;
  - a statement about the extent to which the proposed facility complies with any relevant local planning scheme or planning policy adopted under a scheme and (if applicable) justification for any variation from relevant scheme or policy provisions;
  - plans and graphic illustrations showing the type of facility and its relationship with adjacent development, including the proposal's elevations showing the extent, height and appearance, proposed materials and colour, any screening or fencing, and any external lighting;
  - details of any significant environmental constraints or vegetation to be removed and, where relevant, commitments stating how these constraints will be managed to prevent an unacceptable impact on the environment;
- map and a statement about where the proposed facility is to be located. If the facility is proposed within an easement or corridor, consultation with other users is to be demonstrated; and
  - a statement explaining how the proposed facility addresses the Guiding principles for the location, siting and design of telecommunications infrastructure set out in Section 5.2 of this Policy.

### 6. APPENDIX 1 - DEFINITIONS

**Carrier** has the same meaning given to the term in the *Telecommunications Act*.

**Facility** has the same meaning given to the term in the *Telecommunications Act*.

**Relevant health and safety standard** means health and safety standards specified for the installation and operation of telecommunications facilities under the Telecommunications Code of Practice, *Radio Communications Act*, Industry Code for Mobile Phone Base Station Deployment 2011, and Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields - 3 kHz to 300 GHz published by the Australian Radiation Protection and Nuclear Safety Agency as RPS3.

**Telecommunications infrastructure** means any part of the infrastructure of a telecommunications network and includes any line, equipment, apparatus, tower, antenna, tunnel, duct, hole, pit, or other structure used, or for use, in or in connection with a telecommunications network.

**Tower** has the same meaning given to the term in the *Telecommunications Act*.



# Installation of Telecommunications Facilities Policy

## City Policy

### Responsible Directorate: Planning and Community Development

**Objective:** To outline the City's position on the installation of telecommunications facilities in the district.

#### 1. Application:

This Policy shall apply to all telecommunications facilities which are proposed to be installed in the City of Joondalup.

#### 2. Definitions:

**"telecommunications facility"** means any facility as described in the *Telecommunications (Low-impact Facilities) Determination Act 1997*, (e.g.: mobile phone towers); does not include facilities covered by the City's *Satellite Dishes, Aerials and Radio Equipment Policy*.

**"low impact facility"** means a facility used for telecommunications as described in Section 3.1 — Facilities of the *Telecommunications (Low-impact Facilities) Determination Act 1997*. This Policy shall apply to all telecommunications facilities which are proposed to be installed in the City of Joondalup.

**Note:** Under the *Telecommunications Act 1997* certain facilities cannot be low impact facilities. Namely, designated overhead lines, a tower that is not attached to a building, a tower attached to a building and more than 5 metres high, an extension to a tower that has previously been extended, and/or an extension to a tower if the extension is more than 5 metres high.

**"carrier"** means a telecommunications company that is licensed by the Australian Communications and Media Authority as a carrier.

#### 3. Statement:

Wherever practicable, the City does not support the installation of telecommunication facilities unnecessarily close to schools, childcare establishments, hospitals and general residential areas.

The City will take into consideration the comments of the local community, if required to consider a Development Application for telecommunications facilities.

#### 4. Details:

##### 4.1. Installation of Low Impact Telecommunications Facilities:

The City recognises that it is bound by Federal legislation relating to telecommunication facilities and that it has no jurisdiction over the location or installation of "low impact" facilities. Notwithstanding the above, the Policy Statement remains applicable.

##### 4.2. Installation of Other Telecommunications Facilities:

The City recognises the right of landowners/applicants to submit Development Applications for telecommunication facilities deemed to be other than low impact under the *Telecommunications Act 1997*. The City also acknowledges its obligation to make a recommendation to the Western Australian Planning Commission or determine the Application in its own right.

Upon receiving a Development Application for a telecommunication facility, the City will advertise the proposal for a 30-day period and consult with the local community surrounding the proposed site. Owners and occupiers of property within a radius of 400 metres from the location of the proposed facility will be advised in writing, at the cost of the applicant, and afforded an opportunity to make comment prior to the matter being considered at a Council Meeting.

In making a recommendation to the Western Australian Planning Commission or in determining the Application, the Council will have regard to:

- the comments and concerns of the local community;
- the merits of the particular proposal;
- compliance with the *Telecommunications Code of Practice 1997*;
- compliance with matters required to be considered under the *City of Joondalup District Planning Scheme No. 2*;
- the general concerns of the Council regarding the potential effects of telecommunication facilities; and
- the topography of the site and surrounding area, the size, height and type of the proposed facility, the location and density of surrounding vegetation, and the nature and density of adjacent development.

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**Creation Date:** December 2002

Formerly:

- *Telecommunications Facilities*

**Amendments:** CJ166-08/12

- Related Documentation:**
- *City of Joondalup District Planning Scheme No. 2*
  - *Telecommunications Act 1997*
  - *Telecommunications Code of Practice 1997*
  - *Telecommunications (Low-impact Facilities) Determination Act 1997*

Draft revised State Planning Policy 5.2: Telecommunications Infrastructure  
City of Joondalup submission

	Initiative / objective	City comment
<b>2. Objectives</b>		
1.	<ul style="list-style-type: none"> <li>• facilitate the provision of telecommunications infrastructure in an efficient, cost-effective and environmentally responsible manner to adequately and effectively meet community needs;</li> <li>• manage the aesthetic and community impacts of telecommunications infrastructure;</li> <li>• ensure that telecommunications infrastructure is included in relevant future structure planning as essential infrastructure; and</li> <li>• promote a consistent approach in the preparation, assessment and determination of development applications for telecommunications infrastructure.</li> </ul>	<p>The objectives are supported. However, the revised draft policy states that where there are inconsistencies with local planning policies, SPP 5.2 will prevail. In terms of providing a consistent outcome, this is also supported, however, a number of concerns with the draft revised policy have been identified, as outlined in the following comments.</p>
<b>4.3 Environmental radiofrequency</b>		
2.	<ul style="list-style-type: none"> <li>• ...this policy does not deal with health and safety matters.</li> <li>• Based on ASPANSA's finding's, local planning authorities should not set additional setbacks for telecommunications infrastructure in local planning scheme of local planning policies fro the purposes of health or safety standards for human exposes to electromagnetic radiation.</li> </ul>	<p>Issues relating to EME levels are not deemed to be valid planning considerations in the determination of applications for telecommunications infrastructure, as evidenced by SAT decisions. Revised SPP 5.2 continues to reinforce this position, and this is considered appropriate.</p>
<b>5.1 Guiding principles for local planning schemes, policies, strategies and structure plans</b>		
3.	<ul style="list-style-type: none"> <li>• Where possible, consideration is to be given to the identifications of telecommunications infrastructure sites should for inclusion in relevant future structure planning (local scale minimum), preferably with the potential for co-location with other utility providers (eg power, road, rail)</li> </ul>	<p>Revised SPP 5.2 states that, where possible, telecommunications infrastructure planning should be incorporated into the structure planning process, including the potential for co-location with other utility providers. There is no indication, however, as to how this can practically be achieved. In principle, the idea is supported, as is the case with other utilities, however, telecommunications is a dynamic service that requires adjustments to changes in demand, changes in technology, the introduction of new carriers and changes in the urban landscape. What are deemed suitable sites or locations now may not be suitable in the future. Mechanisms will be needed that enable key stakeholders to participate meaningfully in telecommunications infrastructure network determination and the "reservation" of sites</p>

	Initiative / objective	City comment
		<p>for this purpose.</p> <p>Not all future planning is subjected to the structure planning processes, such as smaller infill developments, yet many of these locations may be inherently suitable as telecommunications infrastructure sites.</p> <p>More guidance is desirable in revised SPP 5.2 as to how TI can be meaningfully accommodated in future structure planning processes, if this is to be a consideration.</p>
4.	<p>For local planning schemes:</p> <ul style="list-style-type: none"> <li>• telecommunications infrastructure should be included as a specific use in the use class tables,</li> <li>• Local governments should consider exempting defined types of proposals in non-sensitive areas from planning approval, using areas adjacent to residential land uses such as industrial, commercial, business and rural areas to provide maximum network coverage.</li> </ul>	<p>The inclusion of the use class 'Telecommunications Infrastructure' within planning schemes is supported, as this will provide consistency when dealing with telecommunications infrastructure within particular zones.</p> <p>The revised policy does, however, state that local governments should consider exempting defined types of proposals in non-sensitive areas from planning approval, for example, within industrial, commercial, business and rural areas. This may be appropriate for some local governments to consider (eg rural areas) however, would need to be considered closely by the City in the event that the use is incorporated into the planning scheme.</p>
5.	<ul style="list-style-type: none"> <li>• The requirement for the advertising of telecommunications infrastructure proposals is at the discretion of the local government. Where it is considered necessary, notice should be given to surrounding landowners up to a maximum of 200m of the proposed infrastructure. There may be some exceptional circumstances that may require broader consultation coverage.</li> </ul>	<p>While it is acknowledged that part of the reason for the revised policy is to provide a consistent approach to the consideration of telecommunications infrastructure, it is considered that a larger range of consultation options should be incorporated into the revised policy.</p> <p>The revised policy indicates that there may be some exceptional circumstances that require broad consultation, however, no example or definition of exceptional circumstances is provided.</p>
<p><b>5.2 Guiding principles for the location, siting and design of telecommunications infrastructure</b></p>		

	Initiative / objective	City comment
6.	<ul style="list-style-type: none"> <li>• The design and siting of telecommunications infrastructure towers and ancillary facilities should be integrated with existing buildings and structures wherever practical to minimise adverse visual impact on the surrounding area using concealment, colour coordination, camouflage and landscaping</li> <li>• Wherever possible, telecommunications infrastructure should be co-located with existing infrastructure and/or within existing infrastructure corridors</li> <li>• If visual amenity setbacks are to be put in place, they should be no greater than the height of the tower.</li> </ul>	<p>Issues relating to potential visual and amenity impacts are valid planning considerations and need to be incorporated in the strategies and policies that seek to guide the installation of telecommunications infrastructure. To this end revised SPP 5.2 represents a relatively superficial framework for the effective management of new and upgraded telecommunications infrastructure installations, as it imposes simplistic standards for achieving amenity and mitigating visual impacts which may prove inadequate or inappropriate in certain circumstances. Specifically, allowing for maximum setbacks from lot boundaries equal to the height of the installation may prove inadequate when viewed in the context of the surrounding area.</p> <p>The notion of providing for the integration of telecommunications infrastructure with existing buildings and structures is supported as such installations tend to be less conspicuous. By contrast, the notion of co-locating telecommunications infrastructure within infrastructure corridors such as transportation would suggest installations that would be more conspicuous. With regard to installations on buildings clarification is required as to how setbacks would be determined given that such installations are invariably located at roof level and building setbacks have already been determined.</p>
<b>5.3 Matters to be considered when determining development applications</b>		
7.	<p>When considering an application for telecommunications infrastructure, the relevant approval authority should only have regard for:</p> <ul style="list-style-type: none"> <li>• The extent to which co-location opportunities are available and have been investigated on suitable nearby existing structures</li> <li>• The need to ensure continuity of supply of telecommunications services in the local areas and the degree to which the proposal will improve network coverage, reliability, capacity and service quality to users</li> <li>• Providing emergency services coverage and the need to eliminate areas of no network coverage (black spots)</li> <li>• The proposal's local environmental, heritage and aesthetic impacts</li> <li>• The extent to which the proposal adheres to the principles of SPP 5.2.</li> </ul>	<p>While the City generally supports the factors for assessment by the local authority it must be noted that there is limited ability for local government to critically evaluate the submissions and statements by applicants in regard to co-location opportunities, interventions that facilitate the attainment of continuous network coverage and the provision of emergency service coverage. These are highly technical competencies into which local governments in general would have limited capacity to evaluate or assess. More guidance is required in revised SPP 5.2 as to how local governments would be empowered to evaluate such data and findings in the process of assessing development applications for telecommunications infrastructure.</p>