

**WESTERN  
AUSTRALIAN  
GOVERNMENT  
Gazette**

1021



PERTH, FRIDAY, 26 MARCH 2004 No. 53 SPECIAL

PUBLISHED BY AUTHORITY JOHN A. STRIJK, GOVERNMENT PRINTER AT 3.00 PM

© STATE OF WESTERN AUSTRALIA

WESTERN AUSTRALIAN PLANNING  
COMMISSION

---

STATEMENT OF PLANNING POLICY No. 5.2

**TELECOMMUNICATIONS  
INFRASTRUCTURE**

PREPARED UNDER SECTION 5AA OF THE TOWN PLANNING AND  
DEVELOPMENT ACT 1928 (AS AMENDED) BY THE WESTERN AUSTRALIAN  
PLANNING COMMISSION AND ISSUED WITH THE APPROVAL OF THE  
MINISTER FOR PLANNING AND INFRASTRUCTURE AND HIS EXCELLENCY  
THE GOVERNOR



---

**CONTENTS**

- 1. CITATION**
- 2. INTRODUCTION AND BACKGROUND**
  - 2.1 Telecommunications Services
  - 2.2 Aerial Cables
  - 2.3 Mobile Telephone Networks
  - 2.4 Planning for Telecommunications Infrastructure
  - 2.5 Planning Approval Required for Telecommunications Infrastructure
- 3. OBJECTIVES**
- 4. APPLICATION**
- 5. POLICY PROVISIONS**
  - 5.1 Guiding Principles for the Location, Siting and Design of Telecommunications Infrastructure
  - 5.2 Matters to be Considered when Determining Planning Applications
  - 5.3 Information Required to be Submitted when Lodging a Planning Application
  - 5.4 Commission May Prepare Guidelines
  - 5.5 Local Planning Scheme and Policy Provisions
- 6. APPENDIX 1—DEFINITIONS**

## 1. CITATION

This is a Statement of Planning Policy made under Section 5AA of the *Town Planning and Development Act 1928* (as amended). It may be cited as Statement of Planning Policy No. 5.2 Telecommunications Infrastructure.

## 2. INTRODUCTION AND BACKGROUND

### 2.1 Telecommunications Services

Before 1991, telecommunications services in Australia were provided by a single carrier, Telecom. Its activities were governed only by Commonwealth legislation. Deregulation of the industry followed with the introduction of the *Telecommunications Act 1991*. This legislation gave carriers the right to construct telecommunications facilities on any land or attach a facility to a building or other structure for the purpose of supplying a telecommunications service. Although carriers were subject to consultation and environmental assessment procedures they were immune from State planning and environmental legislation.

On 1 July 1997 the original Telecommunications Act was repealed and replaced by the *Telecommunications Act 1997*. The main effect of the new legislation was that it required the installation of telecommunications facilities, *except those that are exempted specifically by the legislation*, to comply with State (and local) planning and environmental approval procedures.

The importance of telecommunications services in Western Australia is recognised in the Western Australian Planning Commission's *State Planning Strategy* (1997), which advocates the provision of an effective state-wide telecommunications network in a manner consistent with the State's economic, environmental and social planning objectives.

Modern telecommunications are an essential and beneficial element in the life of communities and in the State and national economy. New communications technology is rapidly advancing and being developed to meet the growing demand for better communication at home, in business, health and welfare and in public services. For opportunities and benefits to be realised it is important that appropriate and adequate telecommunications infrastructure is provided and that it is available to all on a cost-competitive basis.

The expansion and installation of telecommunications networks usually involves the physical development of land and/or alteration to the appearance of buildings or structures, which may have impacts on the character and amenity of local environments. It is important therefore that planning policies ensure that facilities are designed and installed in a manner that protects the visual character and amenity of local areas. It is also desirable that they provide for the effective and efficient roll-out of networks and avoid lengthy and litigious approval procedures.

### 2.2 Aerial Cables

In the Perth Metropolitan Region, it is the State Government's policy that all new electricity and telecommunications cables be placed underground. Exceptions to the policy are likely to be where there is no option other than for the installation of overhead cabling as a consequence of unsuitable ground conditions.

In regional areas aerial cabling will be considered where it can be demonstrated that there are long-term benefits to the community of greater value than the disadvantages of overhead cabling.

In such instances it will be necessary for any aerial cabling proposal to be widely canvassed in the affected community and for statistically valid evidence of support for the proposal to be produced prior to approval.

In the event that it is necessary and accepted for telecommunications cables to be placed overhead, there is a State Government expectation that the cables should be removed and placed underground (at the carrier's expense) when it can be demonstrated and agreed by the carrier that it is technically feasible and practical to do so.

### 2.3 Mobile Telephone Networks

Due to the rapid expansion of the telecommunications industry, and the increasing demand for mobile telephone services in particular, the location, siting and development of facilities can become an issue of particular interest in local communities, with debate focusing on visual amenity and public health.

Mobile telephone networks operate through base stations, which incorporate a radio transmitter, a receiver and an antenna. The 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.

Mobile phone base stations need to be carefully located in relation to each other so each cell in the network functions efficiently to ensure minimal network congestion and good signal quality. Mobile phone antennas generally need to be mounted clear of surrounding obstructions like trees and buildings to avoid loss of reception and allow the mobile phone base station to cover its intended cells 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 an area of increasing mobile phone use the number of cells needed to maintain service quality and capacity increases. Often this means one or more additional base stations are needed, even in areas where mobile network coverage already exists.

Use of mobile phones has raised public interest in possible health issues associated with exposure to electromagnetic emissions. All carriers are required to comply with the Australian Communications Authority's *Radiocommunications (Electromagnetic Radiation—Human Exposure) Standard (2003)*. This incorporates substantial safety margins to address concerns for potentially sensitive groups in the community such as children, pregnant women, the infirm and aged.

Research undertaken by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) has reported that environment radiofrequency levels near base stations for the digital mobile phone network are extremely low. The ARPANSA study reported that the highest daily average level was well below one per cent of the Australian Communications Authority'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*”.

#### 2.4 Planning for Telecommunications Infrastructure

The Telecommunications Act resulted in the installation of telecommunications facilities, apart from specified facilities and activities, being required to comply with State planning and environmental legislation. This means that, unless exempted by legislation, 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 and Amendment No. 1 1999 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.

The Low-Impact Determination uses the zoning of land to ascertain whether a particular facility is determined as 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 “*an area of environmental significance*”.

Facilities which are listed in the Telecommunications (Low-Impact Facilities) Determination fall outside State and local government control but are required to comply with the Commonwealth *Telecommunications Code of Practice 1997*. Obligations under the Code include requiring the carrier to—

- give notice to the owner and occupier;
- gain agreement with affected public utilities;
- notify road authorities and utility service providers if the carrier needs to close or divert roads or other infrastructure to install facilities; and
- take all reasonable steps to find out whether it is able to co-locate its facility with an existing facility.

All other facilities constitute “*development*” under the *Town Planning and Development Act 1928* and planning approval is required from the relevant planning authority before development is commenced.

This Statement of Planning Policy provides a policy framework for the preparation, assessment and determination of applications for planning approval of telecommunications facilities within the context of the planning system of Western Australia. Separate approval may be required from other Government agencies under other legislation.

#### 2.5 Planning Approval Required for Telecommunications Infrastructure

Planning approval is required from the relevant planning authority before development of telecommunications infrastructure can be commenced. In most cases local government is the responsible authority because local government town planning schemes provide the basis for planning controls within a local area.

Applications to commence development for telecommunications facilities are to be lodged with the local government that will determine the application.

In the Perth Metropolitan Region and in other areas where regional planning schemes apply, approval to commence development may be required either from the Western Australian Planning Commission or from both the Commission and local government in accordance with the development control arrangements under the region scheme.

An application to commence development should be submitted on the relevant form to the local government in whose area the development is proposed. The form is to be countersigned by the owner of the land and, where relevant, the owner of the infrastructure upon which the facility is to be installed. Where the development is on Crown land or on a road reserve, the application should be countersigned by the Department for Planning and Infrastructure on behalf of the owner.

### 3. OBJECTIVES

The objectives of this Policy are to—

- facilitate the provision of telecommunications infrastructure in an efficient, cost-effective and environmentally responsible manner to meet community needs;
- facilitate the development of an effective state-wide telecommunications network in a manner consistent with the economic, environmental and social objectives of planning in Western Australia as set out in the *Town Planning and Development Act 1928* and the *State Planning Strategy*;
- assist community understanding of the issues involved in the design and installation of telecommunications infrastructure and provide opportunities for community input to decision-making;
- promote a consistent approach in the preparation, assessment and determination of applications for planning approval of telecommunications infrastructure;
- minimise disturbance to the environment and loss of amenity in the provision of telecommunications infrastructure; and
- ensure compliance with all relevant health and safety standards in the provision of telecommunications infrastructure.

### 4. APPLICATION

This Policy applies to the zoning, subdivision and development of land throughout Western Australia in respect of all telecommunications infrastructure other than those facilities exempted under the Telecommunications Act.

### 5. POLICY PROVISIONS

#### 5.1 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—

- There should be a co-ordinated approach to the planning and development of telecommunications infrastructure, although changes in the location and demand for services require a flexible approach.
- Telecommunications infrastructure should be strategically planned and co-ordinated, similar to planning for other essential infrastructure such as transport networks and energy supply.
- Telecommunications facilities should be located and designed to meet the communication needs of the community.
- Telecommunications facilities should be designed and sited to minimise any potential adverse visual impact on the character and amenity of the local environment, in particular, impacts on prominent landscape features, general views in the locality and individual significant views.
- Telecommunications facilities should be designed and sited to minimise adverse impacts on areas of natural conservation value and places of heritage significance or where declared rare flora are located.
- Telecommunications facilities should be designed and sited with specific consideration of water catchment protection requirements and the need to minimise land degradation.
- Telecommunications facilities should be designed and sited to minimise adverse impacts on the visual character and amenity of residential areas.
- Telecommunications cables should be placed underground, unless it is impractical to do so and there would be no significant effect on visual amenity or, in the case of regional areas, it can be demonstrated that there are long-term benefits to the community that outweigh the visual impact.
- Telecommunications cables that are installed overhead with other infrastructure such as electricity cables should be removed and placed underground when it can be demonstrated and agreed by the carrier that it is technically feasible and practical to do so.

- Unless it is impractical to do so telecommunications towers should be located within commercial, business, industrial and rural areas and areas outside identified conservation areas.
- The design and siting of telecommunications towers and ancillary facilities should be integrated with existing buildings and structures, unless it is impractical to do so, in which case they should be sited and designed so as to minimise any adverse impact on the amenity of the surrounding area.
- Co-location of telecommunications facilities should generally be sought, unless such an arrangement would detract from local amenities or where operation of the facilities would be significantly compromised as a result.
- Measures such as surface mounting, concealment, colour co-ordination, camouflage and landscaping to screen at least the base of towers and ancillary structures, and to draw attention away from the tower, should be used, where appropriate, to minimise the visual impact of telecommunications facilities.
- Design and operation of a telecommunications facility should accord with the licensing requirements of the Australian Communications Authority, with physical isolation and control of public access to emission hazard zones and use of minimum power levels consistent with quality services.
- Construction of a telecommunications facility (including access to a facility) should be undertaken so as to minimise adverse effects on the natural environment and the amenity of users or occupiers of adjacent property, and ensure compliance with relevant health and safety standards.

#### 5.2 Matters to be Considered when Determining Planning Applications

Before determining an application for telecommunications infrastructure the Western Australian Planning Commission and/or local government should consider and have regard to the—

- extent to which the proposal contributes to the social and economic benefits of affordable and convenient access to modern telecommunications services for people and businesses throughout the State;
- need to ensure continuity of supply of telecommunications services to people and businesses in the local area or region;
- effect of the proposal on the environment and natural landscape and the extent to which the proposal affords protection of these elements;
- effect of the proposal on any place of cultural heritage significance on or near the land;
- extent to which the proposal enhances or maintains visual amenity including streetscape and minimises adverse visual impacts;
- degree to which the proposal is co-ordinated with other services;
- extent to which the proposal fulfils the requirements of Section 5.3 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 5.1 of this Policy.

#### 5.3 Information Required to be Submitted when Lodging a Planning Application

In addition to the requirements for planning applications under the relevant town planning scheme, applications for planning approval of telecommunications infrastructure are to include such of the following information as is relevant to a description and assessment of the proposal—

- graphic illustrations (including photographs of similar facilities and/or computer-generated simulations) showing the type of facility and its relationship with adjacent development;
- elevations showing the extent, height and appearance of the proposed facility as viewed from any adjacent street, public place and adjacent property;
- proposed materials and colour of the facility, and proposed arrangements for maintenance and/or future modifications in response to changes to any adjacent buildings or structure;
- any screening or fencing proposed in conjunction with the facility, including arrangements for maintenance;
- any external lighting of the proposed facility and/or the facility site;
- details of any existing vegetation to be removed and any proposals for landscaping and/or restoration of any disturbed land;
- details of any significant environmental constraints and, where relevant, commitments stating how these constraints will be managed to prevent an unacceptable impact on the environment; and
- details of the timing of works involved in establishing the facility and any arrangements for temporary access and/or changes to existing access facilities during the course of construction;

The application should also be supported by a written statement or report setting out—

- (i) the maximum power output of the facility and radiofrequency electromagnetic energy levels in accordance with the Industry Code for the Deployment of Radiocommunications Infrastructure 2002. This statement is to demonstrate that the carrier accepts full responsibility for compliance with the Radiocommunications Act;
- (ii) how the proposed facility relates to the existing and proposed network of telecommunications infrastructure, and what (if any) additional facilities are known by the proponent to be under consideration to meet projected future increases in demand;
- (iii) the extent to which the proposed facility complies with any relevant town planning scheme or planning policy adopted under a scheme and (if applicable) justification for any variation from relevant scheme or policy provisions;
- (iv) where the proposed facility (e.g. trenching cables such as optic fibre) is to be located within an easement or corridor, details as to how the facility will affect the capacity for future installations within that easement or corridor; and
- (v) how the proposed facility addresses the Guiding Principles for the Location, Siting and Design of Telecommunications Infrastructure set out in Section 5.1 of this Policy.

#### 5.4 Commission May Prepare Guidelines

The Western Australian Planning Commission may prepare more detailed guidelines on application preparation and assessment procedures, in consultation with local government and industry, to meet the objectives of this Policy and, if prepared, these should be taken into account in the determination of applications.

#### 5.5 Local Planning Scheme and Policy Provisions

When preparing or amending a town planning scheme or planning policy, local governments may include any relevant provision of this Policy to facilitate best practice in the preparation, assessment and determination of applications for planning approval of telecommunications infrastructure.

In giving effect to this Policy, local governments should give consideration to the equitable distribution of facilities to ensure that the provision of telecommunications infrastructure is equally shared among local communities.

## 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 the Deployment of Radiocommunications Infrastructure 2002, 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.

