

# Communications Facilities and Associated Infrastructure General Code

Effective: 30 July 2010

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# Introduction

#### Application of this code

This Development Code applies to development for the purpose of communications facilities and associated infrastructure including cabling and ducting used to carry electromagnetic signals in all zones.

This code does not apply to:

- a) low-impact facilities, that are exempt by virtue of the Commonwealth's *Telecommunications* (Low Impact Facilities) Determination 1997; and
- b) development on National Land and within designated areas under the National Capital Authority's (NCA) jurisdiction.

The National Capital Plan contains detailed policies relating to the installation and erection of telecommunications facilities on National land and within designated areas.

## Purpose of the Code

This Code is intended to:

- a) ensure that adverse impacts from telecommunications infrastructure are reduced to an acceptable and balanced level commensurate with its benefits;
- encourage a strategic approach to the provision of telecommunications facilities with the aim of achieving forward planning benefits and, where practicable, the co-location or sharing of telecommunications facilities in instances where visual impacts will be reduced;
- c) ensure that the design and siting of telecommunications infrastructure is as unobtrusive as is technically and economically feasible and
- d) ensure impacts on the natural and built environment from the installation of communications facilities are minimised and balanced against its benefits.

The code provides details of the various development provisions that apply to communications facilities for postal; telecommunications and other communication facilities used for receiving and transmitting radiated signals such as radio masts, towers, and antennae systems.

Telecommunications facilities include mobile phone networks and satellite dish and microwave dishes for Pay TV, the Internet; and associated infrastructure including cabling and ducting used to carry electromagnetic signals.

The code also applies to Network Plans for telecommunications facilities and broadband cabling and ducting.

The development provisions are expressed as either quantitative rules or qualitative criteria and provide details that support the zone objectives and permissible uses in the development tables in the Territory Plan.

This code provides guidance, on all of the Authority's development provisions, to intending applicants in designing their development and preparing their development applications. This code is also used by the Authority to assess development applications.

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#### **Network Plans**

The development of Network Plans facilitates the process of considering and approving new facilities. Carriers are encouraged to prepare and maintain a Network Plan for their existing and proposed operations (including cable roll out) in the ACT.

Development that constitutes a change to an existing network or proposed changes to an approved Network Plan are assessed against the Code as an amendment to a Network Plan.

Individual facilities are assessed against any relevant requirements in the Code.

#### Structure of codes

The Communications Facilities and Associated Infrastructure General Code is divided into three Parts:

**Part A – Facility-Type Specific Controls** provide any specific controls for each type of communications facility and associated infrastructure.

**Part B – General Development Controls** provide general controls that are applicable to all communications facilities and associated infrastructure.

Each Part is divided into sections referred to as **Elements**, although each Part may not include provisions for every Element. The Elements describe the various issues for consideration:

- 1. Restrictions on Use
- 2. Building and Site Controls
- 3. Built Form
- 4. Parking and Site Access
- 5. Amenity
- 6. Environment
- 7. Services

Each Element consists of Intents and Items under which are Rules and Criteria.

Intent describes the purpose of the development controls

Rules provide the quantitative, or definitive, controls for development

Criteria provide the qualitative controls for development

In some instances, there are rules that are mandatory. For clarity of use, the mandatory rules are emphasized by the following words: **"This is a mandatory requirement. There is no applicable criterion"**. Non-compliance with these provisions will result in the refusal of a development application. Conversely, the words **"There is no applicable rule"** is used when controls cannot be quantitative or definitive and only criteria exist.

#### **Further information**

Please refer to the Development Application Guide, for more information on preparing applications under the Territory Plan, including the use of assessment codes.

# Part A: Facility-Type Specific Controls

# Part A(1) - Telecommunications (Mobile Phone) Networks and Broadband Cabling and Ducting Reticulation

# **Element 2: Building and Siting Controls**

## Intent:

- a) To encourage a strategic approach to the provision of telecommunications facilities with the aim of achieving forward planning benefits and, where practicable, the co-location or sharing of telecommunications facilities in instances where visual impacts will be reduced
- b) To ensure that adverse impacts from telecommunications infrastructure are reduced to an acceptable and balanced level commensurate with its benefits
- c) To ensure that the design and siting of telecommunications infrastructure is as unobtrusive as is technically and economically feasible

Rules		Criteria	
2.1	2.1 Contents of a Network Plan		
R1		C1	
Development involving telecommunications (mobile phone) networks and the rollout of broadband cabling and ducting reticulation is submitted as a network plan.		Development that is not part of a network demonstrates there is no feasible alternative, considering design, type and co-location, and that the development does not impact on the operation of network facilities and infrastructure and complies with any other relevant rules and criterion in the Code.	
R2			
A ne	etwork plan must map and identify:	This is a mandatory requirement. There is no applicable criterion.	
a)	Principle elements of the network including existing facilities and proposed sites that will form part of the network within the Territory and adjoining NSW Local Governments areas;		
b)	Location of mobile phone base stations and all related and associated infrastructure for each base station, including equipment sheds;		
c)	Hierarchy of the type and height of facilities, Public exclusion zones for each facility and treatment for each zone.		

Rules	Criteria
	C3
There is no applicable rule.	The Network Plan must demonstrate:
	<ul> <li>a) The need for the proposed network considering increased coverage (quality and continuity of service), increased public access to the communications network, economic benefit and any other beneficial impacts.</li> </ul>
	<ul> <li>b) There is no feasible alterative considering network configuration type, height and siting of each facility and number of facilities proposed.</li> </ul>
	<ul> <li>Demonstrate the proposed network is an efficient option considering:</li> </ul>
	<ul> <li>Capacity of the network to deal with emerging telecommunications technologies</li> </ul>
	<ul> <li>ii) Capacity of the network to expand to service future infill and Greenfield development in urban areas;</li> </ul>
	<li>iii) Estimated time the network is planned to be operational;</li>
	iv) Timing of a review of the network.
2.2 Public and Worker Health and Safety	
R4 Development must be located so no workers are placed inside the public exclusion zones around the antennae for activities such as street light maintenance and tree trimming/removal.	This is a mandatory requirement. There is no applicable criterion.
R5	
Secure perimeter fences must enclose climbable structures.	This is a mandatory requirement. There is no applicable criterion.
R6	
Safety and warning signs must be erected.	This is a mandatory requirement. There is no applicable criterion.

Rules	Criteria		
2.3 Associated Equipment	-		
R7	C7		
Associated equipment is screened from public view by surrounding landform and vegetation.	Equipment is sited and screened from view from the street and unleased Territory land and otherwise designed to minimise visual impact on the surrounding area.		
R8	C8		
In residential areas, and on sites adjacent to residential areas, fencing and or landscaping must be used to screen facilities at ground level.	Landscaping on the site comprises plant selection, spacing and density and height to screen the facility within two (2) years of construction.		
R9	C9		
For sites on hills or ridges the equipment do not break the skyline.	Equipment is sited to have a backdrop of trees, landscaping, or high ground or other buildings and structures. For sites on hills or ridges the equipment must be sited and design to minimise visual impact on the skyline and side slopes.		
R10	C10		
Equipments sheds are not sited in front of existing buildings on the site.	Equipment sheds are sited and positioned so as to not impede further development and co-siting of facilities and equipment on the site		
2.4 Materials and Finish			
	C11		
There is no applicable rule.	Materials, colours and finishes are compatible with the existing building or structures.		
	C12		
There is no applicable rule.	The structure is not metallic or white or off-white.		
2.5 Method of Installation			
R13	C13		
Infrastructure is underground and/or co-located with other underground services.	Undergrounding and/or co-location with other underground services is required except where it can be demonstrated that undergrounding is:		
	<ul> <li>a) Undesirable on ecological or cultural heritage grounds; or</li> </ul>		
	<ul> <li>b) That it is not reasonably cost effective to do so.</li> </ul>		

Rules		Criteria
R14		
Overhead cabling or ducting is only permitted where:		This is a mandatory requirement. There is no applicable criterion.
a)	It provides open access to all likely service/utility provided on a non discriminatory basis;	
b)	Not more than one full-service broadband telecommunications cable or duct in addition to the existing copper telephone network will be installed between poles; and	
In urban areas, it utilises poles carrying existing electricity infrastructure and does not run along roads where buildings have a frontage/access to those roads		
		C15
There is no applicable rule.		The visual impact on the streetscape of overhead cabling or ducting installed along road frontage is minimized.

# Part A(2) - Mobile Phone Antenna(e), Towers and Associated Equipment

# **Element 2: Building and Site Controls**

#### Intent:

- a) To ensure that adverse impacts from telecommunications infrastructure are reduced to an acceptable and balanced level commensurate with its benefits
- b) To ensure that the design and siting of telecommunications infrastructure is as unobtrusive as is technically and economically feasible

Rules	Criteria
2.1 Design and Siting	
R16	C16
Facilities and equipment are not sited on community sensitive locations.	Facilities and equipment on, or adjacent to, community sensitive locations must demonstrate that
	<ul> <li>There is no feasible alternative location, considering height, design and siting, type of facility and co-location; and</li> </ul>
	<ul> <li>Impacts on these sites and places are minimised.</li> </ul>
R17	
Facilities and equipment are not located on sites of environmental, nature conservation or heritage significance.	This is a mandatory requirement. There is no applicable criterion.
R18	
Facilities and equipment are sited in:	This is a mandatory requirement. There is no
<ul> <li>a) Commercial, industrial or rural areas, transport and services corridors or low use open space locations; or</li> </ul>	applicable criterion.
<ul> <li>b) Co-sited/ co-located with existing utility structures.</li> </ul>	
Rules	Criteria
R19	
Facilities and Equipment must be:	This is a mandatory requirement. There is no
a) Co-located on existing telecommunications towers; or	applicable criterion.
b) On the roof of an existing building; or	

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Rules		Criteria		
c)	On the face of a building (panel antennae or similar facilities); or			
d)	Attached to existing utility structures such as lighting columns.			
2.2	Roof Mounted Antenna(e) and Towers			
R20		C20		
Roo	f mounted antenna(e) must be:	Roof mounted antennae that break the silhouette of a building and towers are positioned, designed or appropriately screened to minimise visual impacts, from street view.		
a)	Incorporated within an existing building or existing structure; or			
b) c)	Integrated into building design with a new purpose designed roof feature constructed with the same materials, colours and finishes as the existing building or structure.			
R21				
	flat roof buildings, a facility is positioned so as to be visible from the street view.	This is a mandatory requirement. There is no applicable criterion.		
2.3	Materials and Finish			
		C22		
The	re is no applicable rule.	Innovative design solutions to the provision of towers and/or antenna(e) will be considered where the development preserves or enhances the visual amenity.		
		C23		
There is no applicable rule.		Where parts of an antenna(e) or tower are exposed to public view, they are finished in a colour that is not highly reflective and that minimises their intrusiveness.		
		C24		
The	re is no applicable rule.	Materials, colours and finishes are compatible with the existing building or structures.		
		C25		
The	re is no applicable rule.	The structure is not metallic or white or off-white.		
2.4	2.4 Interface			
R26		C26		
The antenna(e) are face mounted to the building and are integrated into the building design and do not break the silhouette of the building.		The antenna(e) shall not significantly detract from the appearance of the building.		

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# Part A (3) - Satellite and Microwave Dishes

# Element 2: Building and Site Controls

## Intent:

- a) To ensure that adverse impacts from telecommunications infrastructure are reduced to an acceptable and balanced level commensurate with its benefits
- b) To ensure that the design and siting of telecommunications infrastructure is as unobtrusive as is technically and economically feasible

Rules	Criteria		
2.1 Design and Siting			
R27	C27		
Facilities must not be visible from the street view or unleased territory land.	Satellite and microwave dishes are positioned and screened to minimise visibility from the street, public view or from residential properties.		
	C28		
There is no applicable rule.	Facilities must be integrated into the building design and be of a compatible scale, design and finish.		
2.2 Materials and Finish			
	C29		
There is no applicable rule.	The structure is not metallic or white or off-white.		
2.3 Clutter			
R30	C30		
Multi-tenanted developments and apartments have a single shared facility.	Where more than one facility is proposed for multi-tenanted developments and apartments, it must be demonstrated that installing an additional facility is the only feasible alternative.		

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# Part B: General Development Controls

# Element 2: Building and Site Controls

## Intent:

- a) To ensure that adverse impacts from telecommunications infrastructure are reduced to an acceptable and balanced level commensurate with its benefits
- b) To ensure that the design and siting of telecommunications infrastructure is as unobtrusive as is technically and economically feasible

Rules	Criteria		
2.1 Location			
R31	C31		
Development is co-located on existing telecommunications, or other infrastructure.	Where co-location is not possible demonstrate physical or technical limitations.		
R32	C32		
Development is located in commercial, industrial or rural areas, or in transport corridors or low use open space locations.	The development is not visually obtrusive and does not result in the proliferation of facilities and infrastructure within a locality.		
R33	C33		
Location of facilities does not cause interference with other telecommunications networks and radio communications services such as but not limited to: defence, security services, emergency services facilities, Australian Federal Police, the Canberra Airport and any other relevant network operating within the Territory.	Development in community sensitive locations has no adverse impacts.		
2.2 Decommissioning and Restoration			
R34 When a facility is no longer required and is to be decommissioned it is removed from the site within 3 months of decommissioning.	This is a mandatory requirement. There is no applicable criterion.		
R35	C35		
If a facility is removed from a building or structure, the site is repaired with materials, colours and finishes the same as the rest of the building.	The site, including temporary sites, is rehabilitated to a condition consistent with the immediate surrounds and not detract from the amenity of the locality.		

Rules	Criteria
2.3 National Capital Plan	
	C36
There is no applicable rule.	Where a development is subject to Special Requirements under the National Capital Plan (including any relevant Development Control Plan) the development is not inconsistent with the Special Requirements.

# Element 4: Parking and Site Access

Intent:

a) To provide for adequate all weather access to sites.

Rules	Criteria
4.1 All weather Access	
R37	
In accordance with section 148 of the <i>Planning</i> <i>and Development Act 2007,</i> the development is accompanied by a statement of compliance from the Department of Territory and Municipal services stating that the verge crossovers are designed and sited to comply with the requirements of <i>ACT Urban Services Design</i> <i>Standards for Kerb Crossing Crossings and</i> <i>Driveways.</i>	This is a mandatory requirement. There is no applicable criterion.
R38	
All weather access is provided to each facility.	This is a mandatory requirement. There is no applicable criterion.
	C39
There is no applicable rule.	On and off-site impacts of providing and maintaining all weather access to a facility, power, trenching, directional boring and maintenance are minimised.

# Element 6: Environment

## Intent:

a) To ensure impacts on the natural and built environment from the installation of communications facilities are minimised and balanced against its benefits.

Rules	Criteria		
6.1 Electromagnetic Energy (EME)			
R40			
All development involving the transmission of radiated signals demonstrate compliance with all the relevant Commonwealth Government requirements for electromagnetic energy emissions by providing the following:	This is a mandatory requirement. There is no applicable criterion.		
a) Results and mapping of cumulative electromagnetic radiation investigations for each site			
<ul> <li>b) Evidence of compliance with relevant Australian Communications and Media Authority (ACA) electromagnetic energy standards for cumulative impacts.</li> </ul>			
R41			
Signage posted on the site state the planned emissions of the facility and that it complies with relevant standards for exposure to electromagnetic energy.	This is a mandatory requirement. There is no applicable criterion.		
6.2 Heritage			
R42	C42		
In accordance with section 148 of the <i>Planning</i> <i>and Development Act 2007</i> , applications for developments on land or buildings subject to interim or full heritage registration are to be accompanied by advice from the Heritage council stating that the development meets the requirements of the <i>Heritage Act 2004</i>	If a statement of compliance is not provided the application will be referred to the Heritage Council in accordance with the requirements of the <i>Planning and Development Act 2007</i> .		

Rules	Criteria
6.3 Tree Protection	
R43	C43
In accordance with section 148 of the <i>Planning</i> <i>and Development Act 2007</i> , where the development requires groundwork within the tree protection zone of a protected tree, or is likely to cause damage to or removal of, any protected trees, the development is accompanied by a tree management plan approved under the <i>Tree</i> <i>Protection Act 2005</i> .	If an approved tree management plan is required, but not provided, then a draft tree management plan is provided. The draft plan will be referred to the relevant agency in accordance with the requirements of the <i>Planning and Development</i> <i>Act 2007.</i>
Note: "Protected tree" is defined under the Tree Protection Act 2005.	
R44	
Trees on unleased Territory land are removed only with the prior agreement in writing of the Territory.	This is a mandatory requirement. There is no applicable criterion.
R45	C45
These is no applicable rule	Trees are protected and maintained during construction to the satisfaction of the Territory.
6.4 Noise	
R46	
Noise generated by a facility or associated equipment is attenuated to comply with ACT Government Noise standards.	This is a mandatory requirement. There is no applicable criterion.