

Council Policy

Telecommunications Installation Small Cell Stobie Pole Mounted Antennae



COUNCIL POLICY



TELECOMMUNICATIONS INSTALLATION SMALL CELL STOBIE POLE MOUNTED ANTENNAE

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TELECOMMUNICATIONS INSTALLATION – SMALL CELL STOBIE POLE MOUNTED ANTENNAE

1. INTRODUCTION

This policy has been prepared to articulate Council's position with regard to the installation of low impact telecommunication facilities in the Adelaide Hills Council area, in particular small cell Stobie pole mounted antennae **(SCSPMA)**.

Telecommunication Carriers need to install facilities to be able to deliver services to their customers. While current government policy allows the rollout of these facilities, one of the aims of the Telecommunications Act, 1997 (the Act) is to balance the needs of telephone companies with the rights of landowners, occupiers and local residents.

When installing large telecommunications facilities such as mobile phone towers, Telecommunication Carriers generally need to obtain development approval from local councils and comply with relevant state and territory planning laws. However, telecommunication companies licensed by the Australian Communications and Media Authority (ACMA) as 'carriers' may install a limited range of facilities (e.g. new antennae and microwave dishes, etc.) without the need to seek state or territory planning approval. The most common of these are 'low-impact facilities' such as Stobie pole mounted antennae.

Council considers that low-impact facilities, in particular SCSPMA, have the potential to impact the visual amenity and character of localities if their location, position and appearance is not properly considered. Given the potential roll out of additional SCSPMA facilities in the Adelaide Hills Council, there is a need for Council to take a proactive position on this issue and enable it to advocate for suggested ways to reduce the visual impacts of such antennae on the surrounding locality.

The policy position aims to protect the character and amenity of the District's residential settlements from the potential negative visual impacts of SCSPMA facilities and provides for guidelines for minimising these impacts. The Policy also outlines the general principles that will be applied in a situation where a change to the Council's adopted policy position is being contemplated.

2. OBJECTIVES

- 2.1 To minimise the impact of the installation of small cell Stobie pole mounted antennae in the Adelaide Hills Council area for current and future generations.
- 2.2 To state Council's position with regard to the installation of small cell Stobie pole mounted antennae within the Adelaide Hills Council area
- 2.3 To protect localities from potential negative visual amenity and character impacts as a result of the installation of small cell Stobie pole mounted antennae.
- 2.4 To advocate that this infrastructure be placed on commercial land or infrastructure as opposed to public, where possible.
- 2.5 Balance the visual impact of small cell Stobie pole mounted antennae with the requirement to address mobile black spots and provide adequate mobile coverage to Adelaide Hills' residents, business and visitors for public safety, commerce and accessibility.

3. **DEFINITIONS**

- 3.1 SCSPMA Small cell Stobie pole mounted antennae
- 3.2 Facility(ies) Low-Impact Facility including small cell Stobie pole mounted antennae
- 3.3 **Carriers** A telecommunication company authorised by regulatory agencies to operate a telecommunications system
- 3.4 **TIO** Telecommunications Industry Ombudsman
- 3.5 The Act The Telecommunications Act, 1997
- 3.6 The Determination Telecommunications (Low-impact Facilities) Determination 2018
- 3.7 The Code of Practice Telecommunications Code of Practice 2021

4. BACKGROUND

4.1 What are Low-Impact Facilities?

Low-impact facilities are those which, because of their size and location, are considered to have a low impact and be less likely to raise significant planning, heritage or environmental concerns. The Telecommunications (Low-impact Facilities) Determination 2018 lists types of low-impact facilities as follows:

- small radio communications dishes and antennae (small cell Stobie pole mounted antennae)
- underground cabling and cable pits, and
- public payphones.

It is noted that low-impact facilities can take on numerous configurations and forms. However, this policy is only concerned with small cell Stobie pole mounted antennae involving principally panel, yagi, or omni antennae and their associated structures.

The following images in Figure 1 and 2 depict the current configuration of small cell Stobie pole mounted antennae being rolled out in the Council area at Aldgate and Bridgewater. In addition, Figure 3 depicts an alternative example of a pole mounted antennae and enclosure.



Figure 1 & 2: Current 4G installations with omni antenna on utility pole and ground based enclosure (Aldgate and Bridgewater installation)



Figure 3: Current 4G installations using a "Koala" equipment enclosure on the pole (no ground based cabinet)

4.2 <u>Current Exemptions From State Planning Laws</u>

Part 1 of Schedule 3 to the Telecommunications Act 1997 allows a carrier to enter onto land and install a facility if the facility is a low-impact facility, without the need to acquire development plan approval under relevant state laws.

A low-impact facility is specified by the Determination. Two key qualifiers determine whether a facility can be classed as low impact, namely its location relative to the order of sensitivity and specific design parameters. The order of sensitivity, is based on local zoning regimes and has been identified as follows:

• area of environmental significance (i.e. World Heritage Area)

- residential areas
- commercial areas
- industrial areas
- rural areas.

The determination defines where low-impact facilities may be installed based on these zoning considerations. For example, a facility that is deemed low impact in an area zoned rural or industrial may not be low impact if it is installed in a residential area. A facility in an area of environmental significance, such as a World Heritage area or an area on the Register of the National Estate, cannot be designated as a low-impact facility. Figure 4 outlines the types of low-impact facilities in which the exemptions apply.

Column 1 Item no.	Column 2 Facility	Column 3 Areas
1	Subscriber connection deployed by radio or satellite terminal antenna or dish: (a) not more than 1.2 metres in diameter; and (b) either: (i) colour-matched to its background; or (ii) in a colour agreed in writing between the carrier and the relevant local authority	Residential Commercial Industrial Rural
2	Subscriber connection deployed by radio or satellite terminal antenna or dish: (a) not more than 1.8 metres in diameter; and (b) either: (i) colour-matched to its background; or (ii) in a colour agreed in writing between the carrier and the relevant local government authority	Industrial Rural
3	Panel, yagi or other like antenna: (a) flush mounted to an existing structure; and (b) either: (i) colour-matched to its background; or (ii) in a colour agreed in writing between the carrier and the relevant local authority	Residential Commercial Industrial Rural
4	Panel, yagi or other like antenna: (a) not more than 2.8 metres long; and (b) if the antenna is attached to a structure— protruding from the structure by not more than 5 metres; and (c) either: (i) colour-matched to its background; or (ii) in a colour agreed in writing between the carrier and the relevant local authority	Residential Commercial Industrial Rural

Figure 4 – Select Typesof Low-Impact Facilities and Associated Exemptions (Source: Telecommunications (Low-impact Facilities) Determination 2018)

As outlined in Section 4.1, this policy is only related to low impact facility installations involving row 3 and 4in Figure 4 above, namely small cell Stobie pole mounted antennae which includes "Panel, yagi, or other like antennae". For small cell Stobie pole mounted antennae to qualify for the exemption they must be limited to 2.8m in length, be fixed to a mounting arm not exceeding 5m and finished in colours to match its surrounds or be agreed upon with the local authority for that

locality, with negotiations to take place during the public notification process. The opportunity to negotiate as part of the public notification process provides the scope for Council to achieve the stated objectives of this Policy.

4.3 Telecommunications Code of Practice

While engaged in low-impact facility activities, the carrier must comply with the requirements in the Telecommunications Act and the Telecommunications Code of Practice 2021.

The Code of Practice requires that when a carrier is installing low-impact facilities, they must take all reasonable steps to:

- act in accordance with good engineering practice; and
- protect the safety of persons and property; and
- ensure that the activity interferes as little as practicable with:
 - the operations of a public utility; and
 - public roads and paths; and
 - the movement of traffic; and
 - o the use of land; and
- protect the environment.

4.4 How Does a Carrier Select a Location?

It is noted that the installation of small cell Stobie pole mounted antennae aims to address specific black spots in relatively small locations (serving residents within a radius of 100m - 400m of the antennae). There are a number of factors for a Carrier to consider when selecting a location for a small cell Stobie pole mounted antennae. The items below are considered by Telecommunication Carriers to be the most pertinent when determining site selection for such a facility:

- Planning requirements (i.e. heritage listings, conservation areas etc.)
- Property tenure
- Ensure established agreements with respective area Power Distributors (i.e. SA Power Networks)
- AC Power availability
- Transmission (fibre or radio) availability in the immediate area
- Utility pole structural determination
- Power Distributor technical requirements (i.e. cannot install above bare power line conductors)
- Clearances from property boundaries
- Tree / Building clutter for suitable Radio Frequency (RF) performance

4.5 Additional Design Considerations

Under the Act, the maximum height allowance of a small cell Stobie pole mounted antennae is 6.5 metres above natural ground level. The most commonly installed facility is 5.8 metres high. By contrast, mobile phone towers are generally 25–30 metres high.

Telecommunication Carriers are required to keep a minimum of 1.2m physical clearance from uninsulated SA Power Networks power lines for antennas or other ancillary items. This is an SA Power Networks requirement. Clearances can be reduced on poles with insulated cables upon approvals from SA Power Networks.

Carriers can only co-site on certain types of SA Power Networks poles (i.e. not on those with switching/capacitive devices or transformers for example).

Carriers also have their own industry EME precautionary clearances to adhere to for transmitting antennas. Nominally a 5.0m clearance above ground level is required for antennas (base off), for Common Public Areas, however this can be reduced to 4.0m if conditions can be met ensuring any public EME exposure cannot occur. Each type of antenna will emit different EME patterns (plumes), horizontally and vertically from the antenna(s), so physical antenna clearances will vary, so carriers only work with the extremities of the plumes they emit. Telstra for example ensure RPS3 Occupational limit zones (Non-Public "yellow" zones) do not cross property boundaries unless at least 10.0m above ground level and/or at least 3.0m from building rooftops / balconies etc. To ensure compliance there are distinct guidelines that must be adhered.

4.6 <u>Public Notification and Objection Resolution Process</u>

The Telecommunications Code of Practice requires a carrier to:

- notify Council at least 10 business days before commencing the installation of a small cell Stobie pole mounted antennae on Council land
- make reasonable efforts to consult with, and resolve an objection from Council if a written objection is submitted
- respond to any objection in writing
- refer the matter to the Telecommunications Industry Ombudsman (TIO) if Council requests this (referral) in writing within five business days of receiving the carrier's written response
- comply with any direction from the TIO.

4.7 <u>Summary of Objection Resolution Process</u>

Council can object to the carrier about the installation of a small cell Stobie pole mounted antennae on Council land under the Telecommunications Code of Practice. Objections may be made about the:

- use of the land to engage in the activity
- <u>location</u> of a facility on the land
- date when the carrier proposes to start the installation, engage in it or stop it
- likely effect of the installation on the land
- carrier's proposals to minimise <u>detriment</u> and inconvenience, and to do as little damage as practicable, to the land.

Strict timeframes apply to the objection process. An objection under the Code of Practice must be made in writing to the carrier at least five business days before the commencement date for the installation in the carrier's notice. In addition to the 'what Council can object to' list above, it is noted that a preference for a colour or finish treatment should be made at this point in the process.

If Council's objection is not resolved, Council can require the carrier to refer the matter to the TIO. Once a carrier has considered the objection and responded to Council in writing, Council has five business days to request the carrier in writing to refer the objection to the TIO.

The TIO may investigate the proposal and decide whether to issue a direction to the carrier about the installation. Carriers must comply with a TIO direction. The TIO can also investigate complaints that a carrier has failed to give notice as required by the Telecommunications Code of Practice or about the manner in which the carrier has entered the land. Due to the tight time frames involved in this objection process, Administration would in this instance undertake this process and lodge the objection with the TIO.

4.8 <u>Projected Roll Out of Small Cell Stobie Pole Mounted Antennae Installations in Adelaide Hills</u> <u>Council</u>

There is only moderate demand in the near term for Carriers to install additional small cell Stobie pole mounted antennae facilities within the Council area, which is largely on account of the low population base. However, it is difficult to project how many small cell Stobie pole mounted antennae facilities may be required within the Adelaide Hills Council area in the longer term. It is considered likely that an increased roll out Stobie may be required in the future, particularly as part of the 5G upgrade and through an emerging preference for Telecommunication Carriers to install low-impact facilities over traditional large phone towers.

4.9 What Solutions Exist to Minimise the Visual Impact?

Telecommunication Carriers are aware of the need to ensure the installation of small cell Stobie pole mounted antennae is done as sensitively as possible within a given locality. Experience has demonstrated that there is a willingness for Carriers to cooperate with Council to ensure improved outcomes. For example, in previous instances Council has requested that antennae installed as part of a small cell Stobie pole mounted facility be finished in a neutral grey tone, with the associated ground based enclosure a heritage green, so as to blend in with its surrounds. This demonstrates the scope for Council to negotiate appropriate outcomes during the public notification process with regards to colour and finishes (as outlined in Section 2.6).

In addition to colour and finish treatments, there are additional solutions currently under development by Carriers that seek to further reduce the visual impact of these facilities. As demonstrated by Figure 5, a 'pod' solution is currently under trial that combines both the antennas and the radio units inside one tubular casing. This design markedly reduces visual clutter by removing the need for a ground based enclosure. Investigations have confirmed that these 'pods' can be finished in a range of colours to suit the locality in which they are installed. In a particularly sensitive area this could be a reasonable solution.

Another treatment under trial is a reflective wrap for the antennas, which aims to reduce the visual impact through concealment (refer to Figure 6 below). The wrap essentially reflects the colours of the sky and surrounds and thereby minimises its visual impact when viewed from a distance. This is considered an additional option to explore where a proposed location may make it difficult for colour and finish treatments alone to mitigate the visual impact of the proposed facility.



Figure 5: The pod solution (concept under trial) includes antennas/radio units all in one unit.



Figure 6: Reflective wrap installed on antennae to reflect background and respond to changing light conditions

5. APPLYING LOCATION AND DESIGN PRINCIPLES TO MINIMISE IMPACT

- 5.1 As outlined in Section 2.5, under the Telecommunications Act 1997, Council has scope to influence certain outcomes relating to the installation of small cell Stobie pole mounted antennae. In the context of the Adelaide Hills Council area being renowned for its leafy suburbs and country towns, and scenic landscapes which are traversed by tourist routes, it is considered that Council proactively protect the visual amenity and character of these areas, through the application of this policy. In particular, Council should negotiate with Telecommunication Carriers with regard to:
 - the location
 - design (including position); and
 - colour and finish treatments
- 5.2 To support these negotiations the following principles should be applied to the installation of SCSPMA:
 - Be placed on Stobie poles that are in the least obtrusive locations to minimise their visual impact on the locality
 - Be mounted on the top of a pole as opposed to the side mounted option
 - Be either dark grey or dark green as opposed to white, or any other light colour, in order for them to blend in with their natural surrounds as much as possible, and
- 5.3 In addition, the following principles should be applied to the installation of any associated ancillary boxes:
 - Be located at the base (rather than part way up) and behind the respective Stobie pole in order to reduce the visual impact of these on the locality, and
 - Be either dark grey or dark green as opposed to white, or any other light colour, in order for them to blend in as much as possible.
- 5.4 It is noted that the location of SCSPMA is largely determined by technical requirements and hence some alternate locations may not be feasible. However, agreement by Telecommunication Carriers to the application of these location, design and finishing principles will go some way to minimising the potential visual impact of these facilities on the character and amenity of the locality in which they are to be placed.

6. POLICY STATEMENT

- 6.1 Adelaide Hills Council supports the installation of small cell Stobie pole mounted antennae, where the installation appropriately responds to the visual amenity and character of a particular locality.
- 6.2 Adelaide Hills Council does not support the installation of small cell Stobie pole mounted antennae, where the installation will unreasonably impact the visual amenity and character of a particular locality.
- 6.3 Council's preference is for such infrastructure to be placed on commercial and/or private land, as opposed to public, and will advocate with Telecommunication Carriers to achieve this aim, where possible.

6.4 Council will work cooperatively with Telecommunication Carriers to ensure that appropriate design and location outcomes, using best available and most feasible solutions, are achieved with regard to the installation of small cell Stobie pole mounted antennae in the Adelaide Hills Council Area.

7. REVIEW OF THE POLICY

The following general principles will be applied in an instance where a change to the above stated Policy of the Adelaide Hills Council is being contemplated:

- 7.1 It is noted that flexibility to review and change policy is required to enable individuals, the Telecommunication Carriers, the community and/or government to adapt to and adopt change where appropriate.
- 7.2 Any changes to this Policy shall provide an opportunity for public input and debate/discussions before any changes are made.
- 7.3 If any legislative changes are proposed, then Council considers that public consultation be undertaken by the Federal Government. Council would seek to have the opportunity to consider all issues and then comment on those that are appropriate. Where a legislative change in relation to low-impact facilities or other circumstances influence Council's policy position, then the Policy shall be reviewed as expeditiously as possible.

8. DELEGATION

- 8.1 The Chief Executive Officer has the delegation to:
 - Approve, amend and review any procedures that shall be consistent with this Policy; and
 - Make any legislative, formatting, nomenclature or other minor changes to the Policy during the period of its currency.

9. AVAILABILITY OF THE POLICY

9.1 This Policy will be available via the Council's website <u>www.ahc.sa.gov.au</u>.