

## **Network Standard**

# Document No.Title:NS183Installation of private attachments on Ausgrid poles

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Technical Approver		Authorised By			
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#### Revision

No	Date	Description	Technical Approver	Authorised By
0	29/06/2015	Amendments to Telecommunications clause, Amendments to Approval clause, Inclusion of Regional Network Planning/Service Offices	Lal Gunatilleke	Chief Engineer
1	30/09/2016	Amendments to the following clauses: 6.5 Promotional signs, banners, and bunting. 6.6 Special small services. 6.10 Traffic lights. 6.12 Unauthorised advertising and graffiti. The changes made to reflect current procedure following the introduction of the National Energy Customer Framework (NECF).	Lal Gunatilleke	Manager Primary Systems
2	28/10/2016	Removal of NAMS and GIS from the summary page	Lal Gunatilleke	Manager Primary Systems
3	25/07/2019	Inclusion of Annexure E Telecommunications equipment on Ausgrid assets (poles) – Third party submission guideline. Inclusion of new subclause 6.2.1 Charges for private attachments. Amendments to clause 6.7 Telecommunications. Amendments to subclause 7.5.1 Timber poles.	Duminda Thenuwara	Manager T&DME
4	29/10/2021	Changes to equipping zone diagrams, addition of new subclause 7.5.1.1 Kingbolt holes	Duminda Thenuwara	Dean Starkey
5	22/05/2025	Conversion to new Network Standard template, Moving of Telecommunications related content to a new network standard NS288, inclusion of EV charger installation requirements	Duminda Thenuwara	Jacob Bayley

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#### Scope

This standard outlines the requirements and conditions for approval to install private attachments on Ausgrid owned poles and lighting columns.

This standard does not outline the fees which may apply as part of the application process.

This standard does not specify the electrical requirements for pole-mounted Special Small Services, which is covered under Ausgrid's electricity supply standard ES1- Premises Connection Requirements.

#### **Reference Documents**

All work covered in this document shall conform to all relevant Legislation, Standards, Codes of Practice and Network Standards.

#### **Ausgrid Documents**

**ES1** Premises Connection Requirements

NS145 Pole Inspection and Treatment

#### **Other Standards and Documents**

Service and Installation Rules of NSW



#### Clause Standard Requirements

#### 1 Responsibilities

#### 1.1 Attachment owner

- 1.1.1 The attachment owner shall ensure that authorised personnel with current Level 1 or 2 service provider accreditations carry out the installation, except for general flat signs and labels.
- 1.1.2 In cases where attachments which do not make an electrical connection to the network are to be installed and will be fixed to a pole no higher than 5 metres above ground level, the attachment owner shall select suitably qualified personnel to carry out the installation. The minimum qualifications and requirements of qualified personnel are:
  - An Electrician holding a current 'Qualified Supervisor's Certificate Electrical' (NSW) or equivalent, and;
  - Demonstrated competence in the identification of potential electrical hazards that may exist on a pole, based on infrastructure present, and testing for the existence of touch potential.
- 1.1.3 Where a specified expiry period is applicable, it shall be the responsibility of the attachment owner to ensure the removal of the attachment prior to the end of the period.
- 1.1.4 Applications for attachment types not classified in this standard shall be forwarded to Ausgrid for assessment.

#### 1.2 Local councils

- 1.2.1 Local councils shall be responsible for approving applications to install promotional signs (including banners and bunting) on Ausgrid poles within their designated areas, under the condition that the promotional signs meet the requirements prescribed in Clause 2.4.
- 1.2.2 Assessment of promotional signs shall be carried by an officer of the council in accordance with the approval criteria set out in this Network Standard.

#### 2 Attachments

#### 2.1 Approval

- 2.1.1 Only approved private attachments as tabled in Annexure A shall be permitted on Ausgrid poles provided the size limits are not exceeded. A flowchart summarising the process to be followed can be found in Annexure C.
- 2.1.2 An attachment is considered approved if it has been assessed by Ausgrid and satisfies the requirements of this standard.
- 2.1.3 An approved attachment shall be authorised in writing by Ausgrid before being installed.

Refer to Annexure B for examples of suitable and unsuitable pole attachments.

#### 2.2 Private attachments

- 2.2.1 All private attachments other than signs and banners shall display the attachment owner's contact details in the event that the attachment is damaged or requires removal.
- 2.2.2 Suitable waterproof label providing the attachment owner's name and contact details shall be fixed either directly to the attachment or to the pole adjacent to the attachment.

#### 2.3 Signs and labels

- 2.3.1 Poles already supporting multiple signs or a combination of signs and other attachments are not suitable for further attachments. Refer to Annexure B for example.
- 2.4 Promotional signs, banners, and bunting
- 2.4.1 Promotional content shall be limited to community activities such as festivals, charity events, and other non-commercial public notices. Advertising of products, commercial services, or any form of political promotion is not permitted.

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- 2.4.2 Flexible plastic 'Coreflute' signs shall only be approved for temporary periods at the discretion of Ausgrid.
- 2.4.3 Promotional banners shall only be permitted on street lighting columns that are designed to accommodate them. Banners or flags may also be permitted on Ausgrid timber poles (subject to assessment) provided the banners do not interfere with existing pole access or other attachments, and maintain satisfactory clearance<sup>1</sup> from overhead mains at all times.
- 2.4.4 In cases where larger banners are required than the limits in Annexure A, the council assessing the application shall provide Ausgrid with a report from a certified structural engineer demonstrating that the banner loading is within safe limits for the pole concerned. Promotional signs and banners must be installed in accordance with Section 4 of this Standard.

#### 2.5 Decorative bunting

- 2.5.1 Decorative bunting shall have a minimum 2m clearance between the bunting and any low voltage overhead mains. Clearance to overhead mains of other voltages to be determined on application.
- 2.5.2 A limit of five bunting strings is permitted between a single Ausgrid pole and a set of adjacent awnings as shown in Annexure B.
- 2.5.3 Bunting shall be for decorative purposes only and must not feature commercial advertisements or company logos.

#### 2.6 Lighting

2.6.1 Private flood or spot lighting may be installed on selected Ausgrid poles for security and commercial purposes.

Typical private lighting installations are shown in Annexure B.

#### 2.7 Cameras

- 2.7.1 Approved cameras may be installed on selected Ausgrid poles. These include CCTV, wireless video cameras and ancillary equipment. Ausgrid Facilities Access team must be contacted for approval.
- 2.8 Traffic lights
- 2.8.1 Traffic lights shall not be installed on Ausgrid poles unless the installation of a dedicated pole is either not possible or not practical at the given location.
- 2.9 Electric vehicle (EV) chargers
- 2.9.1 Operators wishing to install EV chargers on Ausgrid poles must enter a Facilities Access Agreement with Ausgrid.
- 2.9.2 Operators of EV chargers shall submit a Technical and Operations Manual detailing the equipment used and the method of installation.
- 2.9.3 Approved EV chargers may be installed on Ausgrid poles, as outlined in Section 4.4.
- 2.9.4 EV chargers may be single phase or three phase.
- 2.10 Miscellaneous (unclassified) attachments
- 2.10.1 Unclassified attachments are devices that have not been assessed by Ausgrid and yet to be considered suitable for attachment to poles.
- 2.10.2 Parties seeking to install attachments that are not specified in this Network Standard must provide technical details of the attachment along with the application form.

At a minimum, the information required includes:

- Function of the attachment
- All exterior dimensions
- Total weight

<sup>&</sup>lt;sup>1</sup> The minimum clearance between the banner support and bare overhead mains is the vertical length of the banner.

- Power consumption
- Method of attachment
- Duration of the installation

#### 2.11 Painting of Ausgrid poles

- 2.11.1 Timber poles shall not be painted as it encourages the retention of moisture and provides conditions advantageous for termite infestation and fungi growth.
- 2.11.2 Steel, concrete, fibreglass and fibre cement (Titan) poles shall only be painted following approval from Ausgrid and the relevant Local council.

#### **3** Unsuitable attachments

#### 3.1 Unsuitable attachments

Proposed attachment types not specified in this Standard shall be unapproved attachments until assessed by Ausgrid. Certain attachment types have already been assessed by Ausgrid and classified unsuitable for use on Ausgrid poles. The following attachments shall not be permitted:

#### 3.1.1 Posters

- 3.1.1.1 Wrap-around posters shall not be permitted on Ausgrid poles under any circumstances. Wraparound posters act as a moisture trap that encourages soft rot, which can damage or reduce the life of a pole.
- 3.1.1.2 Flat posters used for promotional purposes shall not be permitted on Ausgrid poles unless they meet the requirements of Clause 1.1.2.

#### 3.1.2 Election signs

- 3.1.2.1 Signs and posters promoting political parties, representatives or candidates during public elections or otherwise shall not be permitted on Ausgrid poles.
- 3.1.2.2 The erection of such signs or posters is prohibited under the Electoral Act 2017 No 66 (Section 184) and the Electricity Supply Act 1995 (Part 6, Division 1, Sections 65 and 65A).
- 3.1.3 Garbage bins
- 3.1.3.1 Future applications to install garbage bins will not be accepted and bins will not be reinstalled when a pole is replaced.

#### 3.1.4 Pole to pole banners

- 3.1.4.1 The installation of banner spans between two (or more) poles or between poles and shopfront awnings shall not be permitted. Ausgrid poles are not designed to support the large wind forces these installations can produce.
- 3.1.4.2 Strings of recessed decorative bunting may be installed between poles and shopfront awnings provided it meets the requirements given in Annexure B and is installed in accordance with Clause 4.8 of this standard.

3.1.5 Mirrors

Mirrors shall not be installed on Ausgrid poles.

#### 3.2 Unauthorised advertising and graffiti

- 3.2.1 Graffiti and unauthorised advertising is strictly prohibited on Ausgrid's poles and lighting columns.
- 3.2.2 In cases where the advertiser can be clearly identified, photographs of the advertising should be taken, prior to removal, to support any warnings or legal action that Ausgrid may decide to undertake.
- 3.2.3 Instances of offensive graffiti must be reported to Ausgrid as soon as possible so that arrangements can be made for prompt removal.

#### 4 Installation

#### 4.1 General

- 4.1.1 All attachments must be installed in accordance with the following:
  - attachments shall be positioned to maintain safe clearances from overhead conductors and in a manner that does not facilitate unauthorised climbing of the pole
  - attachments must not obstruct or interfere with the operation or function of existing fixtures.
- 4.2 For all attachments other than Electric Vehicle chargers, the attachments shall be installed in the defined equipping zones in Annexure D. Where possible these attachments shall be located on the 'down traffic' or footpath side of the pole.

#### 4.3 Authority

4.3.1 Any private attachments installed without Ausgrid authority will be removed immediately and possible legal action taken against the Attachment Owner where applicable.

#### 4.4 Electric vehicle chargers

- 4.4.1 EV chargers shall be installed on timber poles between 500mm and 2400mm above ground level.
- 4.4.2 EV chargers shall use either a switchboard enclosure in accordance with AS/NZS 3000 or pole mounted protection in accordance with Section 5.5.3 of the NSW Service and Installation Rules. Where protection in accordance with the NSW SIR is used, the maximum rating of the current limiting fuse link may be increased to 80 amperes per phase.
- 4.4.3 EV chargers shall not be installed in locations where they impede or obstruct pedestrians, cyclists, vehicles or any other users of the public space in which they are installed.
- 4.4.4 EV chargers shall not be installed in locations where they are subject to damage from vehicles driving or parking.
- 4.4.5 Due to the significant variation in existing site conditions, the optimal location for EV chargers will vary from pole to pole. To achieve the requirements of clauses 4.4.3 and 4.4.4, the following principles should be followed:
  - No part of the EV charger should be installed within 500mm of the face of the kerb, unless the EV charger is protected from vehicle impact by placing it in a position protected by the pole.
  - Cables from the EV charger shall not create a trip hazard through the routing of the associated cables across any part of the pedestrian thoroughfare.
  - EV chargers should not reduce the width of the footpath to less than 1000mm, and should not overhang a paved footpath if the pole is installed in an unpaved part of the footway.

If these principles are not met, it indicates that the requirements of clauses 4.4.3 and 4.4.4 are not met and that an alternative site should be found.

- 4.4.6 EV chargers shall not obscure pole numbers, discs or other asset labels installed on the pole.
- 4.4.7 EV chargers shall not be installed on poles with the following features or properties:
  - Reinforced poles (such as nailed poles)
  - Stay poles, or stayed poles
  - Transformer poles
  - Poles supporting air-break switches
  - Poles with two or more low voltage UGOHs
  - Poles with UGOHs for transmission or high voltage distribution lines
  - Poles with earth down leads for transmission or high voltage distribution lines
  - Condemned poles
  - Conductive poles (including steel and concrete poles)

- Transmission towers
- Communications towers

#### 4.5 Old telecommunication carriers arrangements

4.5.1 A minimum clearance of 600 mm shall be maintained between the private attachment and the lowest broadband service cable (Telstra/Optus/Foxtel etc) where installed.

#### 4.6 Timber poles

- 4.6.1 All attachments on timber poles shall be secured using galvanised steel coach screws, driven their full depth into the pole. Lightweight attachments such as street signs may be attached with appropriately sized tek screws (self-drilling screws).
- 4.6.2 When drilling holes in CCA treated poles, contact with the toxic dust or fumes must be avoided. Appropriate safety equipment including glasses, gloves and a Class P2 or P3 particulate respirator must be worn at all times while drilling CCA treated poles.
- 4.6.3 Holes shall not be drilled within 150 mm of another hole, and attachments cannot be made above pole steps such that their use is impeded.
- 4.7 Concrete, Composite fibre and steel poles and lighting standards
- 4.7.1 All attachments on concrete, composite fibre and steel poles and columns shall be secured using approved stainless steel band clamps.
- 4.7.2 Concrete, composite fibre and steel poles must not be drilled to secure attachments.
- 4.8 Banners and bunting
- 4.8.1 Banners shall only be installed on lighting columns or poles not supporting bare overhead mains.
- 4.8.2 Banners shall be installed on an approved bracket with the upper end secured at both corners and the lower end anchored to the pole via an approved breakaway device, at the inside corner.
- 4.8.3 Banners installed on poles or columns along public roadways shall be attached such that the base of the banner is at least 5m above the roadway in accordance with the applicable Road Authority requirements.



#### **Annexure A: Approved Pole Attachments**

#### A1 Table A1 Approved pole attachment details

	Limits					
Attachment Type	Height (mm)	Width (mm)	Depth (mm)	No. Units <sup>1</sup>	Examples	
Flat Sign/Label – Permanent	800	600	-	1	Steel or aluminium sheet only Traffic speed limit signs Bus stop signs (private and public) Hydrant Labels	
Promotional sign	450	350	-	1	Veterinary Surgery, Private Hospital, Neighbourhood Watch signs	
Promotional banner – General	2000	800	-	1	Carnivals, Charity Events, Cultural Festivals	
Promotional Banner - Special Large	3000	1000	-	1	Various	
Decorative Bunting	300	-	-	5	Various	
Camera	-	-	-	-	Closed-circuit video, Wireless video	
Transport authority digital traffic counter	-	-	-	1	Various	
Transport authority traffic lights	-	-	-	1	Traffic lights	
Transport authority Special event sign (temporary)	900	900	-	1	Various	
Special small service connection point	-	-	-	1	In accordance with Section 5 of Service and Installation Rules of NSW	
Electric vehicle (EV) charging equipment	1500	450	270	1	There may be two charging points in one piece of equipment	

<sup>1</sup> Volume permitted per pole per applicant

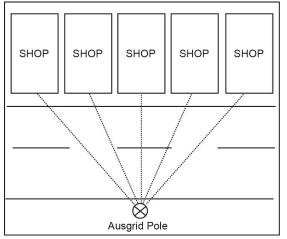


#### Annexure B: Examples of suitable and unsuitable pole attachments

B1 Examples of suitable pole attachments



Flat Sign - Permanent



**Decorative Bunting** 



Electric Vehicle Charger



Flat Sign - Permanent



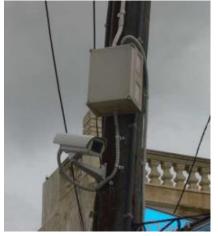
Promotional banner



#### INSTALLATION OF PRIVATE ATTACHMENTS ON AUSGRID POLES



Flood lights



Camera – CCT



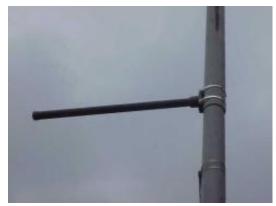
Flat Sign - Permanent Road sign secured to a concrete column with stainless steel band clamps



Flood light



Camera - Wireless



Promotional banner Banner support arm secured with approved stainless steel band clamps



#### B2 Examples of unsuitable pole attachments



Advertising signs



Plastic cable ties



Mirror on pole



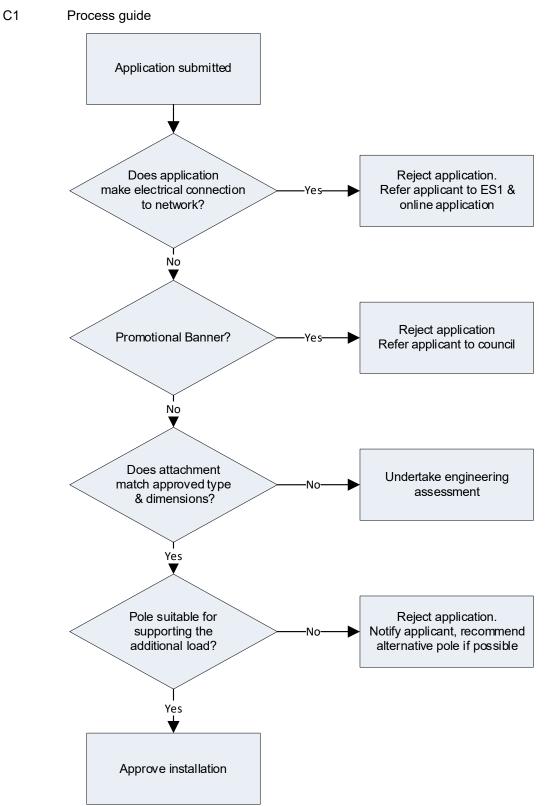
Advertising signs



Unacceptable sign clutter



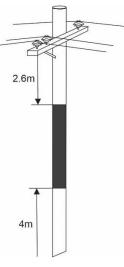
#### Annexure C: Approval process

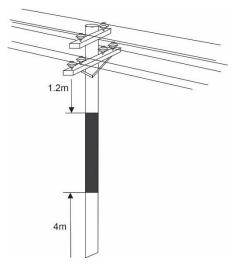




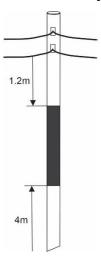
#### **Annexure D: Equipment Zone**

- D1 Pole-equipping zones have been defined to recommend appropriate locations to install private attachments. The equipping zones for a combination of typical pole configurations are shown in Figures D1 to D6 below.
- D2 The equipping zones given in Figures D1 to D6 above do not apply to private lighting installations.





# Figure D1: Pole supporting bare HV mains only







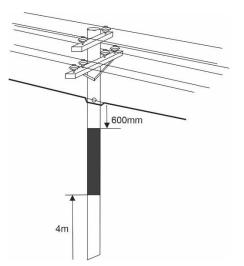
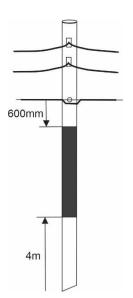


Figure D4: Pole supporting HV and/or LV mains and single or double broadband cables



INSTALLATION OF PRIVATE ATTACHMENTS ON AUSGRID POLES



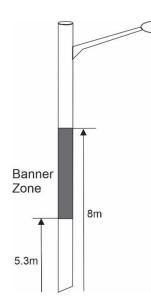


Figure D5: Pole supporting LV ABC and single or double broadband cables

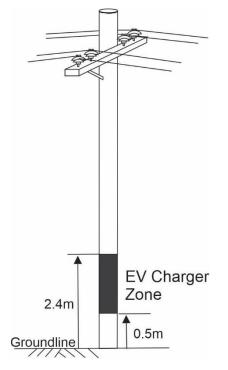


Figure D7: EV Charger mounting zone

Figure D6: Lighting column supporting a banner