



# SHARED USE OF POLES CODE 2020

## **PART 1: INTRODUCTION**

---

- 1.1 Version Control**
- 1.2 Foreword**
- 1.3 Preamble**
- 1.4 Interpretation**
- 1.5 Disclaimer**
- 1.6 Amendments to the Code**
- 1.7 Scope**
- 1.8 Electricity Supply**
- 1.9 How to use this Document**
- 1.10 Definitions**
- 1.11 Copyright**

## **PART 2: GENERAL REQUIREMENTS**

---

- 2.1 Agreements**
- 2.2 Applications**
- 2.3 Fees**
- 2.4 Permits and Standards**
- 2.5 Poles Unsuitable for Shared Use**
- 2.6 Limited Life and Staked Poles**
- 2.7 Clearances**
- 2.8 Method of Attachment of Shared User's Equipment**
- 2.9 Maintenance, Removal, Disconnection and Ownership of Shared User's Equipment**
- 2.10 Effect on Electricity Distribution System**

## **PART 3: CALCULATIONS**

---

- 3.1 Calculations**

## **PART 4: TRAINING & COMPETENCE, AUDITING & RECORD KEEPING**

---

- 4.1 Training and Competence
- 4.2 Auditing and Asset Inspection
- 4.3 Record Keeping

## **PART 5: OPERATION OF ELECTRICAL DISTRIBUTION SYSTEM**

---

- 5.1 Operation of the Electrical Distribution System

## **PART 6: SHARED USERTYPES**

---

- 6.1 Aerial Cabling and Equipment
- 6.2 Radio Frequency Equipment
- 6.3 Signs and Minor Attachments
- 6.4 Flags, Banners and other Decorative Attachments

## **PART 7: APPENDICES**

---

- 7.1 Distribution Company Boundaries
- 7.2 Distribution Company Fault and Emergency Contacts
- 7.3 Forms
- 7.4 VESI RF Isolation Statement

# PART 1: INTRODUCTION

## CONTENTS

1.1	Version Control.....	1
1.2	Foreword.....	2
1.3	Preamble.....	3
1.4	Interpretation.....	3
1.5	Disclaimer.....	4
1.6	Amendments to the Code .....	4
1.7	Scope .....	4
1.8	Electricity Supply .....	5
1.9	How to use this Document.....	5
1.10	Definitions.....	5
1.11	Copyright .....	9

## 1.1 Version Control

Version	Date	Distribution Company	Representatives
1	20/11/2019	AusNet Services	Saman DeSilva
		CitiPower / Powercor	Luke Farrugia (Chair), Anwar Qayyum
		Jemena	Max Demko
		United Energy Distribution	Jim Tsirikis

## 1.2 Foreword

The Shared Use of Poles Code 2020 has been developed by the VESI Shared Use of Poles Code Committee and supersedes the 1996 edition.

This edition of the Code will commence operation on 1 June 2020 and apply to all new applications for Shared Use of Poles within the electricity supply networks operated by the Victorian Electricity Distributors, namely AusNet Services, CitiPower, Jemena Electricity Networks, Powercor Australia Ltd and United Energy.

The Code forms the major part of Victorian Electricity Distributors' "reasonable technical requirements" as referred to in the Electricity Distribution Code. The Electricity Distribution Code is applied under the Electricity Industry Act 2000 (Vic) and is administered by the Essential Services Commission Victoria.

The Code has been subject to extensive industry consultation during its development and offers users with industry agreed specifications intended to assist Distributors and Shared Users to meet their Regulatory obligations. The Code lessens the need to reference the complex, extensive and expanding range of regulations and documentation relating to Shared Use of assets belonging to the owners of Victorian electricity networks.

The Code may not cover all circumstances. These may include unusual attachments, inadvertent omissions or changes to legislation and other codes. The VESI Shared Use of Poles Code Committee does not accept responsibility where this occurs. The relevant Victorian Electricity Distribution Company must be consulted in these circumstances.

Luke Farrugia

Chair

VESI Shared Use of Poles Code Committee

## 1.3 Preamble

This Shared Use of Poles Code (“Code”), which supersedes the “Code of Engineering Practice for Shared Use of Poles” (dated 27 February 1996), has been prepared and approved by the Victorian Electricity Distribution Companies (“Distribution Companies”) which applies to all new Shared Use installations including All-Dielectric Fiber Optic Cables, Antennae, Signs and Banners.

For technical aspects in relation to the maintenance and/or extension of existing PSTN, Co-Axial Cable and Catenary Strung Cable systems refer to the Code of Engineering Practice for Shared Use of Poles 1996. Notwithstanding this, clearances as specified in the new Code will apply to all new Shared Use attachments.

Amongst other things, this Code sets out:

- The requirements for the design, construction, attachment, safety, operation, maintenance and removal of Shared User’s Equipment Attached to a Distribution Company owned Pole.

Before Shared User’s Equipment is attached to a Pole, a Shared User must enter into an Agreement with the relevant Distribution Company and where required, submit and have approved an Application for Shared Use by the relevant Distribution Company (Applications requirements are incorporated within an Agreement).

The format and content of an Agreement depends on the type of Shared Use being employed, however, all Agreements will include the commercial and legal aspects of the Shared Use.

Where an Agreement includes requirements which are additional to or exceed those in this Code, then the requirements of the Agreement shall prevail.

## 1.4 Interpretation

In this Code, unless the context requires otherwise:

- The singular includes the plural and vice versa;
- A gender includes the other genders;
- The Contents and the headings are used for convenience only and do not affect the interpretation of this Code;
- A reference to a thing includes a reference to a part of that thing;
- A reference to a document includes the document as modified from time to time and any document replacing it;
- If something is to be done on a day which is not a Business Day, then it must be done on the next Business Day;
- The word “person” includes a natural person and any body or entity whether incorporated or not;
- The word “month” means calendar month and the word “year” means twelve months;
- The words “in writing” include any communication sent by letter, email or facsimile transmission;
- A reference to any statute, proclamation, rule, regulation or ordinance includes any amendment, consolidation, modification, re-enactment or reprint of it or any statute, proclamation, rule, regulation or ordinance replacing it. A reference to a specified section, clause, paragraph, schedule or item of any statute, proclamation, rule, regulation or ordinance means a reference to the equivalent section of the statute, proclamation, rule, regulation or ordinance which is for the time being in force;

- Wherever “include” or any form of that word is used it must be construed as if it were followed by “(without being limited to)”; and
- A reference to any agency or body, if that agency or body ceases to exist or is reconstituted renamed or replaced or has its powers or functions removed (“defunct body”), means the agency or body which performs most closely the functions of the defunct body.

## 1.5 Disclaimer

The Distribution Company, in preparing and making available this Code, makes no representations or warranties in relation to the information, recommendations, or standards set out in this Code. Any person wishing to use this Code should, before such use, independently assess the commercial, technical and safety ramifications of the information and standards contained in this Code and act in reliance on its own assessment.

## 1.6 Amendments to the Code

Amendments to this Code may be made from time to time by the Code Committee in consultation with stakeholders.

When this Code is amended, the Amendment Date will be inserted on the bottom right hand corner of each page of this Code and the Shared User will be able to obtain a new copy of the Code by accessing the Shared Use of Poles Code located on the VESI website ([www.vesi.com.au](http://www.vesi.com.au)).

Unless otherwise agreed in writing by the Parties, amendments made to this Code will be effective from the amendment date.

Where the amendment relates to:

- Issues of health and safety; or
- Issues which affect the operation or performance of the Electricity Distribution System,

then the Code may specify that compliance with the amendment applies to existing Attached Shared User’s Equipment.

## 1.7 Scope

This Code sets out the minimum requirements which apply to the attachment by a Shared User of its equipment on a Distribution Company’s power or public lighting poles. In setting out these requirements the Code provides support to any Agreement established between a Distribution Company and a Shared User.

Any Agreement established between a Distribution Company and a Shared User may include additional requirements.

For information on electricity supplies refer to the Victorian Service and Installation Rules (SIR).

This Code applies to the attachment of Shared Use equipment such as, but not limited to:

- Cables, wires and leads;
- Power supplies, control boxes, switch boxes, terminal boxes and fuse boxes;



- Telecommunication Antennae, communications dishes and any associated equipment (i.e. cables, terminal boxes, etc.);
- Electrolysis equipment; and
- Minor hardware such as signs, flags, banners, Christmas/event decorations, and traffic signals or any other minor attachments approved by the Distribution Company.

This Code is not normally intended to be retrospectively applied where compliance to the previous Code was met at the time of installation.

It is to be noted that the existing Shared User Equipment can be maintained on a like-for-like basis as per the Code of Engineering Practice 1996 requirements. Where the existing attachments of Shared User Equipment do not comply with the Code of Engineering Practice 1996 requirements, the requirements of this Code shall apply.

## 1.8 Electricity Supply

This Code does not apply to any agreement for electricity supply. The Shared User must follow the relevant Distribution Company's New Connections process.

## 1.9 How to use this Document

This Code has been prepared to enable a Shared User to read only those sections relevant to the type of Shared Use Equipment proposed to be attached to a Pole.

Sections 1 to 5 of this Code applies to all Shared Users Equipment and all attachments must comply with these clauses.

Section 6 applies to specific types of Shared Users Equipment. Shared Users are only required to comply with the sub-clause of the Code that is relevant to the type of Shared Use Equipment they propose to attach to the Pole.

Example: A Shared User proposing to attach a Telecommunication Antennae is required to comply with Sections 1 to 5 and Clause 6.2.2 Radio Frequency Telecommunications Equipment within the Code.

## 1.10 Definitions

In this Code, unless the context requires otherwise or otherwise agreed by the Parties:

- **ABC** has the same meaning as Aerial Bundled Cable;
- **Aerial Bundled Cable** means the Distribution Company's HV or LV insulated aerial bundled cables;
- **Aerial Cable** means a Catenary, wire, cable, or other form of tension member which is Attached to a Pole aerially, but does not include Aerial Customer Lead, PSTN cable, VicTrack's Electrical Conductor or Electrolysis Drainage Cable;
- **Aerial Customer Lead** means the Customer Lead aerially connected;
- **Agreement** means any written agreement (e.g. facility access agreement or license agreement) entered into by the Parties which allows Shared Use of a Pole subject to an Application being approved by the Distribution Company;

- **Amendment Date** means the date on which this Code is amended in accordance with Clause 1.6;
- **Application** means a written document submitted by a Shared User which seeks approval for each proposed attachment to a Pole in accordance with the requirements of an Agreement. The Application contains information which the Distribution Company requires so that it can assess the acceptability of the Shared Use. Typical information that may be required is shown in Appendix A);
- **Antenna** means any system of wires, poles, rods, aerials, reflecting discs, or similar devices used for the transmission or reception of electromagnetic signals;
- **Attach** means to attach, connect, bond, install, or support and **Attachment** and **Attached** have a corresponding meaning;
- **CA** means Communications Alliance, established to develop and administer communications industry technical and operational arrangements;
- **Business Day** means a day which is not a Saturday, Sunday, a public holiday (for the whole day) or a bank holiday (for the whole day) in the State of Victoria;
- **Calculation** means the calculations which are required to be carried out in accordance with this Code including without limitation the calculations required to determine the mechanical loads which are applied to a Pole by Shared User's Equipment;
- **Carriageway** is the part of a road's surface on which vehicles travel;
- **Catenary** means a separately constructed strength member Attached to Poles to which Shared User's Equipment is or may subsequently be attached including that part of an integral bearer cable which is used to support wires and cables and which is enclosed in a cover or a sheath. Catenaries are usually metallic, non-insulated and installed continuously over a number of consecutive spans. They do not form part of any telecommunications circuit;
- **CMEN** means an Electrical Distribution System's earthing system where all HV and LV equipment within an area is connected to a common earth.
  - In a CMEN system of earthing, the LV neutral conductor is permanently connected to earth at:
  - Each of the multiple distribution substations supplying the Electrical Distribution System;
  - All customer's premises, in accordance with the Electricity Safety (Installations) Regulations 2009 (S.R. No. 164/2009) and AS/NZS 3000; and
  - Other points throughout the neutral system, as required;
  - Thus forming a CMEN conductor which has an impedance to ground of less than 1 ohm within the CMEN area;
- **Code** means this document entitled Shared Use of Poles Code including the preamble, scope and appendices;
- **Code Committee** means a committee consisting of representatives of the Distribution Companies;
- **Communication Equipment** means a radio frequency or cable network system belonging to a Telecommunications Carrier which includes, but not limited to, Communication Lines, Radio Frequency Telecommunications Equipment or Facility, Customer Leads, Electrical Equipment (as defined in CA C524), housings, junction boxes and conduits used for the provision of telecommunication services;
- **Communications Line** means a wire or cable which can include strength bearer, catenary, joint closures, optical fiber cables, supports and fittings owned by the Shared User which accommodates telecommunication services, but excluding Customer Lead. Where

a Communication Line is insulated it must be wholly covered with insulating material in accordance with the relevant Australian Standard or equivalent;

- **Customer Lead** means a lead connecting the Shared User's cable network to the customer's premises where the relevant connection is located on:
  - a Pole; or
  - a Catenary within 1 metre of the point at which the Catenary is Attached to the Pole;
- **Data** means the information, including but not limited to survey results, G.I.S. queries, obtained by the Shared User with regards to the particular Pole(s) the Shared User wishes to Attach to.
- **Decorative Attachments** mean any attachments used to promote festivals, public holidays or other events requiring promotion or advertising. Examples include: flags or banners, Christmas steel frame decorations and other large attachments;
- **Distribution Company** means the electricity distribution company (i.e. CitiPower Pty Ltd, AusNet Services Pty Ltd, Powercor Australia Ltd, Jemena Electricity Networks (Vic) Ltd and United Energy Distribution Pty Ltd) which owns the Pole that is subject to an Application;
- **Energy Safe Victoria** means the government body responsible for energy safety and equipment efficiency in Victoria and was formally known as the Office of the Chief Electrical Inspector;
- **Electrical Apparatus** means any electrical equipment including overhead lines and underground cables, the conductors of which are Live and can be made Live;
- **Electricity Distribution System** means the Distribution Company's electricity distribution and subtransmission systems and all equipment forming part of those systems;
- **Electrolysis Drainage Cable** means the electrolysis mitigation system managed by the Victorian Electrolysis Committee;
- **Emergency** means an emergency due to the actual or imminent occurrence; of an event which in any way endangers or threatens to endanger the safety or health of any person or which destroys or damages, or threatens to destroy or damage, any property including, but not limited to:
  - an earthquake, flood, wind-storm or other natural event;
  - a fire;
  - an explosion;
  - a road accident or any other accident;
  - a warlike act, whether directed at Victoria or a part of Victoria or at any other State or Territory of the Commonwealth; and
  - a hi-jack, terrorist act, siege or riot;
- **Elevating Work Platform** means a telescopic device, scissor device, or articulated device, or any combination thereof used to position personnel, equipment and materials at work locations above or below the base support surface;
- **ESV** has same meaning as Energy Safe Victoria and was formally known as the OCEI;
- **EWP** has the same meaning as Elevating Work Platform;
- **Fly-Off Point** means the point at which an Aerial Customer Lead attaches to a bolt or other fixture which is attached to a Pole or, where the Attachment is on or within 1 metre of the Pole, to a Catenary;
- **FOLCB** means Fused Overhead Line Connection Box;
- **FSD** means Fuse Switch Disconnecter;
- **GIS** means Geographical Information System;

- **High Voltage** means r.m.s. power frequency voltages in excess of 1kV;
- **HV** has the same meaning as High Voltage;
- **HV ABC** means the Distribution Company's High Voltage, 3 phase, insulated Aerial Bundled Cable, complete with bare support conductor;
- **Joint Use** means the use of a Pole in accordance with the Joint Use of Poles Arrangement;
- **Joint Use of Poles** means the Joint Use of Poles Arrangement between the Electricity Supply Association of Australia and Telstra. Refer Joint Use of Poles document – The placement on poles of power lines and paired cable telecommunications lines (CJC 1 – 1997, SAA HB87-1997);
- **Limited Life Pole** means a Pole that when inspected by the Distribution Company in accordance with its standard procedures is considered serviceable but because of its condition may not remain serviceable until the next programmed inspection and therefore may be inspected more frequently or staked;
- **Live** means energised or subject to hazardous induced or capacitive voltages;
- **Low Voltage** means Root Mean Square (r.m.s) power frequency voltages up to and including 1kV;
- **LV** has the same meaning as Low Voltage;
- **LV ABC** means the Distribution Company's Low Voltage, insulated Aerial Bundled Cable;
- **LV Service** means the final span or section of a low voltage aerial line that is part of the supply network connected to a customer premises;
- **Macro Cells** are typically:
  - larger
  - on towers and roof tops
  - provide coverage up to several kilometres
- **Make Ready Works** means that work which is necessary to be carried out prior to or at the time when Shared User's Equipment is Attached to a Pole in order to make the Pole suitable for Attachment of Shared User's Equipment but does not include the replacement or maintenance of the Electricity Distribution System which has become unserviceable or obsolete, or any work that may be required for reasons other than to make the Pole suitable for Attachment;
- **Minor Attachments** means attachments with a wind area not exceeding 0.3m<sup>2</sup> and the longest dimension not exceeding 1.0m. Examples include: street signs, lights or security cameras. Excludes all Communication Equipment.
- **Optical Fiber Cable** means a cable which is made up of thin strands of glass, along which light signals can pass to provide communication;
- **Parties** means the Distribution Company and the Shared User and **Party** means any one or both of the Parties as the context requires;
- **Personal Protective Equipment (PPE)** means clothing, equipment and/or substance which when worn or correctly used, protect parts or all of the body from foreseeable risk of injury or disease at work or in the workplace;
- **Pole** means a Pole including crossarms, raisers, brackets and other fittings owned and installed by the Distribution Company to support its Electricity Distribution System;
- **Pole Identification Number** means a number or combination of numbers and letters that are used as part of an identification system by a Distribution Company to uniquely identify individual poles;

- **PSTN** means Public Switched Telephone Network and is that part of the public telecommunications network which enables any customer to call and communicate with any other customer either automatically or with operator assistance;
- **Public Lighting Pole means a Distribution Company's Pole, which is specifically designed for public lighting and may or may not have Shared User's Equipment Attached;**
- **Radio Frequency Telecommunications Equipment or Facility** means a radio frequency communications transmitter or receiver and its associated infrastructure including any antennas, housings and other equipment.
- **RF** means Radio Frequency;
- **RTO** means Registered Training Organisation;
- **Safety Observer** means a person with sufficient knowledge of the task being performed and competent for the duty of observing and warning against unsafe approach to Electrical Apparatus;
- **Shared Use** means where the Shared User has or does Attach Shared User's Equipment;
- **Shared User** means a party who intends to or is using a Pole in accordance with this Code and an Agreement;
- **Shared User Equipment** means all items of equipment owned or operated by the Shared User that are Attached or are proposed to be Attached or at some stage have been Attached to a Pole;
- **Small Cells** are radio transmitters for mobile phone services. Telcos install them on structures such as light poles, bus shelters and the sides of buildings.
- **Staked Pole** means a wooden Pole that is reinforced in accordance with the Distribution Company's standard procedures for Pole reinforcement;
- **Stayed Pole** means a Pole which is supported in one or more directions by an aerial stay or a ground stay or both;
- **Strained Configuration** means the Attachment of an Aerial Cable or PSTN cable to a Pole where the Attachment and any related fittings are specifically designed to support the tension of the Aerial Cable, PSTN cable, VicTrack's Electrical Conductor or Electrolysis Drainage Cable.
- **Victorian Rail Track** means a corporation established under Section 8 of the Rail Corporations Act 1996 (as in force immediately before the commencement of the Transport Integration Act 2010) and the corporation continues under Section 116 of this later Act.
- **VicTrack** is a trading name that may be used by Victorian Rail Track for the purpose of carrying on business.

## 1.11 Copyright

This document is copyright. Except as permitted under the Copyright Act 1968 (Commonwealth), no part of this publication may be reproduced by any process, electronic or otherwise, without the specific written permission of the copyright owner. Neither may information be stored electronically in any form whatsoever without such permission.

© 2020

AusNet Services (Distribution) Ltd ABN 37 108 788 245,  
Level 31, 2 Southbank Boulevard, Southbank, Victoria 3006;

CitiPower Pty Ltd ABN 76 064 651 056,  
40 Market Street, Melbourne, Victoria, 3000;

Jemena Electricity Networks (VIC) Ltd ABN 82 064 651 083,  
Level 16, 567 Collins Street, Melbourne, Victoria 3000;

Powercor Australia Ltd ABN 89 064 651 109,  
40 Market Street, Melbourne, Victoria, 3000; and

United Energy Distribution Pty Ltd ABN 70 064 651 029  
43-45 Centreway Place Mount Waverley Victoria 3149.

Enquiries shall be addressed to the Distribution Company within whose area Shared Use is required (Refer Clause 7.1 – Distribution Company Boundaries).

# PART 2: GENERAL REQUIREMENTS

## CONTENTS

2.1	<b>Agreements .....</b>	<b>1</b>
2.2	<b>Applications.....</b>	<b>1</b>
2.3	<b>Fees.....</b>	<b>2</b>
2.4	<b>Permits and Standards.....</b>	<b>2</b>
2.4.1	Permits .....	2
2.4.2	Standards .....	2
2.5	<b>Poles Unsuitable for Shared Use.....</b>	<b>2</b>
2.6	<b>Limited Life and Staked Poles .....</b>	<b>2</b>
2.7	<b>Clearances.....</b>	<b>3</b>
2.7.1	Asset Clearances of Shared User's Equipment.....	3
2.7.2	Clearances to Ground, Buildings, Structures and Vegetation.....	3
2.7.3	Distribution Company to Direct .....	3
2.8	<b>Method of Attachment of Shared User's Equipment.....</b>	<b>3</b>
2.9	<b>Maintenance, Removal, Disconnection and Ownership of Shared User's Equipment.....</b>	<b>4</b>
2.9.1	Emergency .....	4
2.9.2	Persons, Mobile Plant or Vehicles .....	5
2.10	<b>Effect on Electricity Distribution System.....</b>	<b>5</b>



## 2.1 Agreements

Before Shared User's new Equipment is attached to a Pole, a Shared User must enter into an Agreement with the relevant Distribution Company.

The format and content of an Agreement depends on the type of Shared Use being employed.

## 2.2 Applications

Unless otherwise agreed in writing by the Parties, a Shared User who proposes to Attach new Shared User's Equipment to a Pole must in addition to having an Agreement, submit an Application to the Distribution Company.

An Application form, or the information required to complete an Application relevant to the type of Shared Use, is available from the Distribution Company.

As a minimum, the Shared User must identify in the Application all information that allows the Distribution Company to appropriately assess an application. This includes the items below:

- a. The Pole(s) to which it proposes to Attach Shared User's Equipment by quoting its unique Pole Identification Number used by the Distribution Company or other agreed method of identification;
- b. The type of Shared User's Equipment it proposes to Attach;
  1. Dimension drawings, photographs and manufacturer's drawings;
  2. All relevant test results regarding the suitability of the Shared User's Equipment and method of Attachment;
  3. Aspects of the Shared User's Equipment or method of Attachment that will impact on the appearance, safety, operation, maintenance or performance of the Electricity Distribution System including, but not limited to, size, colour, weight, material type, safe distances of approach where equipment emits radiation, levels of radiation from equipment, zone of radiation of equipment, operating voltage, power consumption and any applicable mechanical strengths such as, but not limited to tensile strength of a cable and minimum failing load of brackets;
  4. In addition to above for Communication Equipment:
    - Number and position of Aerial Customer Leads and Fly-Off Points (known at the time of Application. For any additional Fly-Off Points post the submission of Application refer to the commercial agreement) that the Shared User will be using in the vicinity of a Pole.

It is to be noted that:

- Unless otherwise agreed in writing by the Parties, a Shared User may not attach more than two Fly-Off Points to a Pole or Catenary and no more than five (5) Aerial Customer Leads to any Fly-Off Point on a Pole or Catenary.
  - Any other connections not defined as an Aerial Customer Lead or a Fly-Off Point requires a design assessment including Pole load calculations.
  - Identification or labelling details for any Communication Equipment which will be installed.
  - 24/7 faults response contact details (email and phone).
- c. Confirmation of compliance with all relevant legislation and the requirements of this Code; (Reference should be made to [Clause 7.1](#) for geographical areas covered by the Distribution Companies).



## 2.3 Fees

Any applicable fees will be detailed in the Agreement with the Distribution Company.

## 2.4 Permits and Standards

### 2.4.1 Permits

Unless otherwise agreed in writing by the Parties, the Shared User must, at the cost of the Shared User, obtain all necessary authorisations, licenses, permits and other requirements as required by law or otherwise to enable the Shared User to Attach, operate and maintain the Shared User's Equipment.

### 2.4.2 Standards

In respect of the Attachment, operation and maintenance of the Shared User's Equipment, the Shared User shall comply with the relevant Australian standards, statutory and regulatory requirements.

## 2.5 Poles Unsuitable for Shared Use

Due to operational and safety concerns the following types of poles are unsuitable for Shared Use at all times:

- Hinged public lighting poles;
- All types of frangible public lighting poles (except for minor signage as per [Clause 6.3](#));
- 66kV cable head poles (cable termination poles);
- New attachments to unserviceable poles (this may include use of temporary stays).

In addition to the above the Shared User must refer to the relevant [Clause 6.1.2](#) (d) of this Code to determine which additional types of poles are considered unsuitable for their particular Shared Use.

## 2.6 Limited Life and Staked Poles

**Limited Life Pole:** Access by an EWP only. A connection can be made using a slack span or service drop. No need for Pole replacement. Pole condition needs to be reassessed if the last inspection date is more than 12 months old.

**Staked Pole:** Attachment can be made, subject to loading assessment and access requirements. It is to be noted that the Poles are restored only to the strength of stake/s which may be lower than the original Pole strength.

## 2.7 Clearances

### 2.7.1 Asset Clearances of Shared User's Equipment

Clearances applicable to various types of Shared User's Equipment are detailed in Section 6 of this Code.

- It is the responsibility of the Shared User to ensure that the new Attached Shared User's Equipment complies with the asset clearance requirements prescribed in this Code or in the Agreement related to the Shared Use.
- Existing Shared User Equipment can be maintained on a like-for-like basis as per the Code of Engineering Practice 1996 requirements. Where the existing clearances do not comply with the Code of Engineering Practice 1996 clearances, the clearances of this Code shall apply.
- Where an asset clearance for a particular situation is not included in this Code the Shared User shall seek approval by applying in writing to the relevant Distribution Company.

### 2.7.2 Clearances to Ground, Buildings, Structures and Vegetation

It is the responsibility of the Shared User to ensure that all required clearances between Shared User's Equipment, the ground, buildings, structures and vegetation, comply with the asset clearance requirements prescribed in this Code or in the Agreement.

Clearance requirements to buildings and structures for Shared Users aerial cable networks are to be in accordance with CA C524:2013 – External Telecommunication Cable Networks.

Vegetation management (Tree Impact) requirements for Shared Users aerial cable networks are specified in CA C524:2013 – External Telecommunication Cable Networks.

### 2.7.3 Distribution Company to Direct

Unless otherwise agreed in writing by the Parties, if the Distribution Company determines that the Shared User's Equipment does not provide clearance in accordance with this Code, it may (but is under no obligation to) direct the Shared User to take action to comply with the clearance requirements.

## 2.8 Method of Attachment of Shared User's Equipment

The Shared User must ensure that the Shared User's Equipment is attached to a Pole using a method of Attachment so that:

- No screws or bolts or other construction materials penetrate the surface of any steel or concrete Pole;
- Metal or other strapping (e.g. Band-it) is only permitted to be installed on distribution cable head poles, where an engineered solution approved by the Distribution Company is proposed by the Shared User which ensures that any existing cable integrity is not compromised;

- c. All strapping material attached to other than distribution cable head poles (cable termination poles) is to be placed so that it is in direct contact with the Pole and must not be placed over any existing conduit, cable or wire;
- d. It does not interfere with or impair the access, use, function or operation of the Electricity Distribution System or any third party equipment;
- e. It is securely fixed to the Pole so that under high wind conditions it will not be dislodged or encroach within the clearances set out in this Code;
- f. It does not create or pose any risk to any persons as far as reasonably practicable;
- g. It will not assist a person to climb the Pole from ground level; and
- h. It will not damage Distribution Company equipment.

## 2.9 Maintenance, Removal, Disconnection and Ownership of Shared User's Equipment

- a. The Shared User must ensure the Shared User's Equipment is properly maintained with respect to its condition, operation, security and method of Attachment;
- b. Unless otherwise agreed in writing by the Parties, except in the case of an Emergency (in which case [Clause 2.9.1](#) will apply), where the Distribution Company reasonably considers that the Shared User has not;
  - Correctly Attached the Shared User's Equipment in accordance with Clause 2.8; or
  - Has failed to provide for proper operation or maintenance of its Shared User's Equipment to an extent that the Shared User's Equipment has or may become a safety concern, or has or may affect the security of the Electricity Distribution System.

The Distribution Company may direct the Shared User to remedy the concern within an agreed specified time.

- c. Unless otherwise agreed in writing by the Parties, in the event that a Shared Use Pole is no longer required by the Distribution Company (which includes but not limited to alterations to the Distribution Company's network with respect to road management projects) or it becomes unsuitable for Shared Use (refer [Clause 2.5](#)), then the Distribution Company will advise the Shared User in writing as per Agreement that Shared Use is to be terminated.
- d. In the event that termination of Shared Use of a Pole is required by the Distribution Company, it is not the responsibility or at the cost of the Distribution Company to provide an alternative means of support or location for the Attached Shared User's Equipment unless otherwise agreed with the Distribution Company.
- e. Unless otherwise agreed in writing by the Parties, the Shared User will, at its own cost, remove Attached Shared User's Equipment upon termination of Shared Use agreement of a particular Pole, and where required, will repair, reinstate and/or rectify the Pole (to the requirements of the Distribution Company) to as far as reasonably possible the same condition as it was immediately before the Shared User's Equipment was Attached.
- f. Attached Shared User's Equipment always remains the property of the Shared User.

### 2.9.1 Emergency

- a. Unless agreed to in writing by both parties, in case of emergencies, the distribution company may disconnect, remove or adjust any attached shared user's equipment that hinders the safety of the asset, or pose risk to any persons affected by such emergencies. Once the assets are made safe, the distribution company will as soon as reasonably practicable notify the shared user of the action taken by the Distribution Company.

- b. All reasonable costs of readjustment, installation or connection of the Shared User's Equipment after an Emergency shall be borne by the Shared User.
- c. In the event of a Shared User Emergency involving Distribution Company assets, the Shared User should contact the relevant Distribution Company. Contact details are available in Clause 7.2 of this document or individual Distribution Company websites.

### 2.9.2 Persons, Mobile Plant or Vehicles

Unless otherwise agreed in writing, it is the responsibility of the Shared User to comply with all relevant legislation including *The Blue Book* (The Code of Practice on Electrical Safety for Work On or Near High Voltage Electrical Apparatus – [www.esv.vic.gov.au](http://www.esv.vic.gov.au)) for works involving Distribution Company assets where such works involve persons, mobile plant or vehicles.

The Shared User must ensure that when working on a Pole or in the vicinity of a Pole in respect of the Shared User's Equipment, the Shared User must employ Safe Work Method Statements (SWMS) including, but not limited to:

- a. Where required, use only an insulated access platform of a type recognised as suitable for work near Live electrical assets, and any access platform used must be accompanied by a current electrical test certificate;
- b. Ensure all personnel use appropriate and recognised Personal Protective Equipment (PPE);
- c. Have in place safe works procedures which as a minimum will:
  - Specifically relate to the tasks being undertaken;
  - Be clearly readable and available on site at all times; and
  - Specify requirements for Safety Observer if required.

## 2.10 Effect on Electricity Distribution System

The Shared User agrees that notwithstanding that permission has been granted for Shared User's Equipment to be Attached, the Shared User must ensure that the Shared User's Equipment does not damage, inhibit the operation or maintenance of the Electricity Distribution System or reduce its capacity, reliability or safety. Also the Shared User must ensure that the Shared User's Equipment does not damage, inhibit the operation or maintenance of any existing third party Shared User's Equipment or reduce its capacity, reliability or safety.

# PART 3: CALCULATIONS

## CONTENTS

3.1	Calculations.....	1
-----	-------------------	---

### 3.1 Calculations

An Application is required to include Calculations and supporting Data as determined by the Distribution Company to ensure:

- The Pole maximum allowable design load is not exceeded; and
- All clearances specified in this Code are achieved.

An Application will only be accepted by the Distribution Company where the results of the Calculations are acceptable to the Distribution Company.

# PART 4: TRAINING & COMPETENCE, AUDITING & RECORD KEEPING

## CONTENTS

- 4.1     **Training and Competence ..... 1**
  - 4.1.1     Telecommunications work ..... 1
  - 4.1.2     Signs, minor attachments, banners and other decorative attachments.... 1
- 4.2     **Auditing and Asset Inspection..... 1**
- 4.3     **Record Keeping ..... 2**

## 4.1 Training and Competence

The Shared User must ensure that any works undertaken on the Distribution Company's Pole is carried out by persons who have received training and the person must be assessed by a Registered Training Organisation (RTO) as competent.

Training shall be provided by a RTO who has demonstrated experience in the subject matter.

Records to verify training associated with persons accessing Distribution Company assets must be kept.

### 4.1.1 Telecommunications work

Shared Users shall refer to and comply with all requirements specified in the "Safety and Compliance Training Requirements for Telecommunications Work on VESI Network Operator Assets". Refer to the VESI website ([www.vesi.com.au](http://www.vesi.com.au)) for these requirements.

### 4.1.2 Signs, minor attachments, banners and other decorative attachments

Shared Users undertaking the installation and maintenance of signs, minor attachments, banners and other decorative attachments shall be trained prior to undertaking this work. Refer to the VESI website ([www.vesi.com.au](http://www.vesi.com.au)) for the training standard – "VESI Training Module - Installation and Maintenance of Attachments on Distribution Company Poles".

## 4.2 Auditing and Asset Inspection

Unless otherwise agreed, the Shared User must undertake auditing in respect of new and existing Shared User Attachments:

- a. The Shared User Equipment, including but not limited to:
  1. Compliance with all clearance requirements;
  2. The method and integrity of all Attachments.
- b. Works procedures and practices including but not limited to:
  1. The training and qualification of the Shared User's employees or contractors;
  2. Relevant safety standards.

Post completion of construction:

- c. Telecommunication Carrier must demonstrate compliance to Communications Alliance Code 524 Section 8.2.3 (Maintenance) requirements.
- d. Shared Users shall undertake regular asset inspection audits to ensure the safety and integrity of the Shared User Equipment.

The Shared User shall report its auditing results, at no cost to the Distribution Company, upon request.

The Distribution Company may from time to time undertake an audit to check compliance with the requirements of this Code. In the event the Distribution Company finds there is a material breach of requirements, the Distribution Company may require the Shared User to undertake a full independent audit, at the Shared User's cost, and provide a copy of the audit report to the Distribution Company.

Any non-compliance identified must be rectified appropriately by the Shared User.

The Shared User must provide the Distribution Company with details of its auditing processes and results upon request from a Distribution Company.



## 4.3 Record Keeping

Unless otherwise agreed, the Shared User must maintain electronic records in respect of the Shared User's Equipment including but not limited to:

- a. The type of Shared User's Equipment Attached;
- b. The locations of all Shared User's Equipment, including reference to the Distribution Company's Pole Identification Number;
- c. Details of date of Attachment and removal of Shared User Equipment;
- d. The training and qualification of the Shared User's employees or contractors;
- e. Audits undertaken by the Shared User; and
- f. On request, the Shared User must provide copies of the above records to the Distribution Company.

# PART 5: OPERATION OF ELECTRICAL DISTRIBUTION SYSTEM

## CONTENTS

5.1      Operation of the Electrical Distribution System ..... 1

## 5.1 Operation of the Electrical Distribution System

To facilitate Attachment of Shared User's Equipment on the Pole it may be necessary for the Distribution Company to carry out operations including, but not limited to switching, earthing or auto-reclose suppression on its Electrical Distribution System.

- a. The requirement to carry out an operation may be requested by either Party;
- b. Where the Distribution Company requires the operation, the Shared User will be advised of the reasons for the operation;
- c. Where an operation is required by the Shared User, the Shared User must submit a written Application requesting that the operation be carried out;
- d. Where an Application is required in accordance with Clause 5(c), the Shared User must submit that application providing reasonable notice to the Distribution Company of the date it proposes erecting its Shared User's Equipment. Refer to VESI website – Network Access and Switching Authorities ([www.vesi.com.au](http://www.vesi.com.au)).
- e. The above may not apply in the event of an Emergency.

# PART 6: SHARED USERTYPES

## CONTENTS

<b>6.1</b>	<b>Aerial Cabling and Equipment .....</b>	<b>1</b>
6.1.1	Pole Survey and Design Schedule .....	1
6.1.2	Shared User's Construction and Shared User's Equipment.....	2
<b>6.2</b>	<b>Radio Frequency Equipment.....</b>	<b>11</b>
6.2.1	Shared User's RF Equipment – Communication Antennae and Associated Equipment .....	11
6.2.2	RF Related Application Forms (Preliminary/Formal Applications) .....	11
6.2.2.1	Preliminary Application Form .....	11
6.2.2.2	Formal Application .....	11
6.2.3	Pole Suitability .....	11
6.2.3.1	Attachment of Telecommunication Carrier – Macro Cell Facilities .....	11
6.2.3.2	Attachment of Telecommunication Carrier – Small Cell Facilities .....	11
6.2.4	Radio Frequency Isolation Requirements .....	14
6.2.5	Isolation Processes and Documentation .....	14
6.2.6	Where an Isolation Switch has not been Installed .....	15
6.2.7	Signage Requirements.....	15
6.2.8	Update and Use of the National Site Archive .....	15
6.2.9	Construction Notification .....	15
6.2.10	RF Signage Requirements.....	15
6.2.10.1	Standard Sign 1 – Antenna Warning Isolation Procedure.....	16
6.2.10.2	Standard Sign 2 – RF Hazard Proximity .....	16
6.2.10.3	Standard Sign 3 – Site Identification on Poles.....	16
6.2.10.4	Standard Sign 4 – Site Identification on Control Cabinet .....	17
6.2.10.5	RF Signage Arrangements for Attachment to Poles.....	18
<b>6.3</b>	<b>Signs and Minor Attachments .....</b>	<b>19</b>
6.3.1	Scope.....	19
6.3.2	Technical Conditions and Requirements .....	19
6.3.3	Existing Attachments .....	20
6.3.4	Recording of Attachments.....	21
6.3.5	Personal Electrical Clearance Requirements .....	21
6.3.6	Installation and Maintenance Requirements .....	21
6.3.7	Right to Remove Attachments for Works .....	23
<b>6.4</b>	<b>Flags, Banners and other Decorative Attachments.....</b>	<b>24</b>
6.4.1	Scope.....	24
6.4.2	Applications .....	24
6.4.3	Technical Conditions and Requirements .....	24
6.4.4	Record Keeping .....	25

6.4.5    **Personal Electrical Clearance Requirements .....26**  
6.4.6    **Installation and Maintenance Requirements .....26**  
6.4.7    **Right to Remove Attachments for Works .....26**

## 6.1 Aerial Cabling and Equipment

The Shared User must meet the design requirements specified by the Distribution Company.

The following detailed information is to be provided as part of the Application for Shared Use, in the format specified by the Distribution Company (which may consist of construction drawings):

### 6.1.1 Pole Survey and Design Schedule

Survey/Design Schedule Item No:	Survey/Design Schedule Item Details:
1	Pole Identifier Number
2	Available address details, e.g. adjacent street number, street, suburb / township / city, and postcode (provide a Map where applicable).
3	Pole material (e.g. Concrete, steel, wood).
4	Nominal voltage of the network circuit above.
5	Make ready works requirements for relevant poles, conduits, pits or substations are to be identified and provided in a format prescribed by Distribution Company. The scope of works for each Facility to be accessed is to be listed.
6	The main category of Shared User types in accordance with Section 6 of this Code supplemented with all the following details: <ol style="list-style-type: none"> <li>The nature of equipment to be Attached;</li> <li>The earthing systems proposed or other means of mitigating earth potential rise;               <ul style="list-style-type: none"> <li>The methods used to limit low frequency induction;</li> <li>The methods used to limit electrical back-feed from equipment.</li> </ul> </li> </ol>
7	The identification of every Pole, including any attached Catenary, intended to provide subsequent Fly-Off points in accordance with <a href="#">Clause 6.1.2</a> of this Code.
8	The presence and type of assets belonging to a third party in accordance with Section 6 of this Code.
9	The heights of attachment positions above the normal ground surface of the following: <ol style="list-style-type: none"> <li>Distribution Company overhead circuits, aerial service lines, and any other cable systems,</li> <li>Existing Shared User assets, and</li> <li>The proposed communications assets.</li> </ol>
10	The span length.
11	The clearances to be attained, under all specified design conditions, by the Shared Use asset/s at Pole, midspan or the point of least separation from: <ol style="list-style-type: none"> <li>Adjacent power circuits;</li> <li>The ground;</li> <li>Other Shared Users assets.</li> </ol>

12	<p>The accurate results of structural Calculations required on Shared Use structures, identifying:</p> <ol style="list-style-type: none"> <li>The allowable short duration and long duration (wood poles only) Pole capability;</li> <li>The actual short duration and long duration (wood poles only) combined Distribution Company assets and Shared User assets loads reflected to the head of the Pole. Load Calculations provided must be for all specified design wind static load and temperature conditions;</li> <li>For wood poles the above will also include the results of long duration Pole capability and load Calculations.</li> </ol> <p>Calculations are required to be undertaken by a suitable person who is competent in overhead distribution design.</p>
13	The comparison of the results to the structure capacity.
14	Any other information as agreed with the Shared User that may be deemed necessary by the Distribution Company.

### 6.1.2 Shared User's Construction and Shared User's Equipment

- Subject to Clause 6.1.2.(b) of this Code, where the Shared User's Equipment is an Aerial Cable then Attachment to the Pole shall be subject to maintaining clearances as required in Section 6 Tables 1 to 3 or as included in an Agreement and shall be Attached to the Pole:
  - On the centre line of the Pole where a Strained Configuration is used; or
  - In all other cases, on the side stipulated by the Distribution Company.
- The Shared Users Aerial Cable shall wherever possible be Attached at a height above ground level that allows the proposed Aerial Cable to follow the general contours of the Pole route.
- If the Distribution Company, in its sole discretion, permits the Shared User to Attach its Aerial Cable on a substation Pole, subject to maintaining the clearances specified by Figure 4, the Shared User must Attach such Aerial Cable to the footpath side of the Pole.
- A Shared User may not Attach Shared User's Equipment to the Pole in such a way that in the reasonable opinion of the Distribution Company prevents or affects access by the Distribution Company to its Pole and Electricity Distribution System by ladder or Elevating Work Platform to an extent that standard works procedures cannot be used for the purpose of construction, maintenance or operation.
- Minimum clearances of Shared User's Equipment installed on a Distribution Company's Pole shall be in accordance with minimum clearance Tables 1, 2 and 3 following in this section. It should be noted that:
  - In all cases adequate clearances must be provided to ensure that the Distribution Company's and Shared User's Equipment can be safely maintained and operated;
  - Such clearances shall only be measured using optical devices or similar methods. Devices that could contact electrical assets shall not be used without the written permission of the Distribution Company;
  - The Distribution Company may require larger clearances than stated in the tables in specific situations for construction, maintenance and operational reasons;
  - Unless otherwise stated, the clearances are Minimum Clearances to be maintained at any time;

- v. Unless agreement is obtained in writing from a Distribution Company, Shared User's Equipment must not be installed above a Distribution Company's overhead circuit;
- vi. Dimensions in all the tables are in millimetres (mm);
- vii. Unless otherwise stated clearances are vertical;
- viii. Summary of the minimum clearance tables:
  - **Table 1** Minimum Clearances between Items of a Distribution Company System and Shared User Equipment on Poles;
  - **Table 2** In-Span Minimum clearances between Distribution Company's System and Shared User Equipment;
  - **Table 3** In-Span Ground and Structure Clearances for Shared User's Aerial Cables and Leads;
  - **Table 4** Minimum clearances between Items of Electricity Distribution System Company System and Shared User RF Equipment on Poles.

<b>Table 1 – Minimum clearances between Items of a Distribution Company System and Shared User Aerial Cabling &amp; Equipment on Poles</b>	
<b>Item of Electricity Distribution System (Minimum asset to asset clearances)</b>	<b>Shared User's Equipment</b>
	Coaxial cable, Catenary, Optical Fiber Cable, PSTN and other forms of Aerial Cable, insulated Aerial Customer Leads and associated equipment including: <ul style="list-style-type: none"> <li>• Attachment Hardware;</li> <li>• Consumer's Terminal Box;</li> <li>• Power Supply Equipment;</li> </ul>
Distribution Communications Cables	300
Insulated LV Wiring (including insulated LV services) & UG Cable dressed on the Pole (risers)	100
Earth & Supervisory O/H Circuits	380
Bare LV Mains & Services O/H Circuit	1000
FSD Figure (2)	1000
FOLCB Figure (2)	1000 Below 100 elsewhere
LV ABC Mains O/H Circuit	600
Insulated LV Services	150 mm
6.6, 11, 22 kV O/H Circuits Note (6)	2400
66 kV O/H Circuit Note (6)	3900



**The following notes are to be read in conjunction with Table 1:**

1. Minimum clearance between Shared User's Equipment and Distribution Company's equipment such as public lighting brackets, earthing conductors, insulated LV wiring, insulated LV boxes, etc. to provide a reasonable working clearance and prevent abrasion damage, is 100mm (Refer Figure 1).
2.
  - a) Where exposed blade type LV isolators or fuses are present refer to the relevant Distribution Company for insulating measures of these devices before access. Otherwise a clearance of 1400mm from bare LV mains is required.
  - b) For any Shared User equipment dressing past an FSD refer to the relevant Distribution Company for insulating measures of these devices. Refer to Figure 2. In all cases adequate clearances must be provided to ensure that the Distribution Company's and Shared User's Equipment can be safely maintained and operated. These devices are typically operated from ground level using an insulated stick and require unobstructed access from below.
3. Where Shared User's Equipment is attached to a cable head Pole (cable termination Pole), or a wooden crossarm/insulated support fitted to a substation Pole, a clearance of 2000 mm (in accordance with the requirements in Clause 2.7 of this document) shall be maintained from the nearest part of any HV bushing as shown in Figures 3 or 4 as applicable.
4. When an underground cable is present on a Pole, no item of Shared User's Equipment shall be attached to the Pole within the clearance distance stated. The Shared User's Equipment must not cross the existing cable (Refer Figs. 2 and 3). The Shared User must not move or in any way adjust the cable to allow Attachment of the Shared User's Equipment.
5. The Table 1 clearances apply to Pole structures without HV equipment such as isolators, fuses, switches, etc. Where such equipment exists, additional clearances will be required. Refer to relevant Distribution Company for clearance requirements.
6. These Minimum Clearances include provision for future subsidiary circuits. However alternative clearances may be applicable. Refer to relevant Distribution Company for clearance requirements.
7. Any Attachment to the Pole (excluding cables and conduits dressed to the Pole) must not be lower than 2700mm from the ground level.
8. Minimum clearance between telecommunications cables attached to the Pole shall be in accordance with CA C524:2013 – External Telecommunication Cable Networks (300mm between cables).
9. Minimum clearance between telecommunications cables dressed on the Pole or aerial customer leads attached to the Pole shall be in accordance with CA C524:2013 – External Telecommunication Cable Networks (50mm between insulated cables and 100mm between non-insulated cables).

Table 2 – In-Span Minimum clearances between Distribution Company System and Shared User Equipment		
Item of Electricity Distribution System	Shared User's Equipment	
	a. Coaxial cable, Catenary, PSTN cable and other forms of Aerial Cable and Aerial Customer Lead	b. Non-Conductive Cable – Optical Fiber Cable
Distribution Communications Cables Note (3)	300	300
Earth & Supervisory O/H Circuits	380	380
Insulated LV Service O/H Circuits	300	300
Bare LV Mains & Services O/H Circuits	750	500
LV ABC Mains O/H Circuit	600	500
6.6, 11, 22 kV O/H & HV ABC Circuits Note (5)	1800	1800
66 kV O/H Circuit Note (5)	2700	2700

**The following notes are to be read in conjunction with Table 2:**

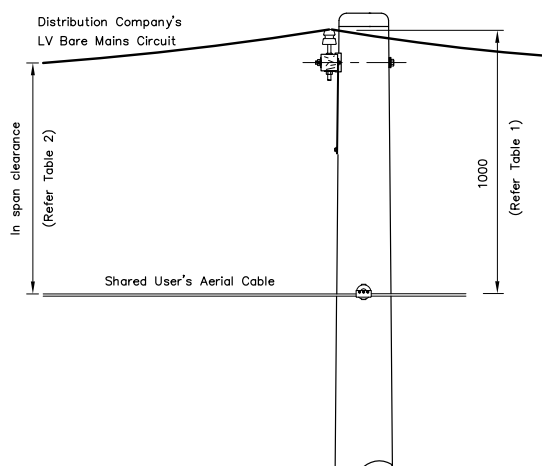
1. Table 2 does not apply to clearances associated with Telecommunication midspan drops. Personal clearances as per the VESI Safety Compliance Training Requirements for Telecommunications Work on VESI Network Operator Assets must apply.
2. Clearances are subject to the Distribution Company's design requirements.
3. Shared User to Shared User Telecommunication cables clearances are to be in accordance with CA C524:2013 – External Telecommunication Cable Networks (300mm between cables).
4. For Clearance at Customer Point of Attachment:
  - Insulated Service - 600mm between cables.
  - Non-Insulated Service - 1000mm between cables.
5. Provision for future subsidiary circuits must be considered in design. Refer to Distribution Company for guidance.

Table 3 – In-Span Ground and Structure Clearances for Shared User's Aerial Cables and Leads		
Description	Direction	Minimum Clearance (mm)
a. Over a 2000 mm wide strip in the centre of each carriageway of a road. (Note 1)	Vertical	5500
b. Over any other part of a freeway, tollway, primary state arterial road, arterial road, over dimensional route or relevant docks road	Vertical	5500
c. Over any other part of a secondary state arterial road, major road or collector road	Vertical	5500
d. Over any other part of any other road	Vertical	5500
e. Over any part of a driveway	Vertical	3900
f. Over any other ground traversable by vehicles (other than a road)	Vertical	4600
g. At the connection to a building or structure (excluding a Pole)	Vertical	Not Permitted
h. Over the surface of any water not accessible to boats with masts	Vertical	4500
i. Elsewhere	Vertical	5000
j. Over any part of a building, structure, scaffolding or post normally accessible to persons	Vertical	2700
k. Over any part of a building, structure, scaffolding or post not normally accessible but on which a person can stand	Vertical	2700
l. From any part of a building, structure, scaffolding or post not normally accessible to persons	Any Direction	100
m. From windows, openings and balconies and any parts of a building, structure, scaffolding or post normally accessible to persons	Any Direction	100

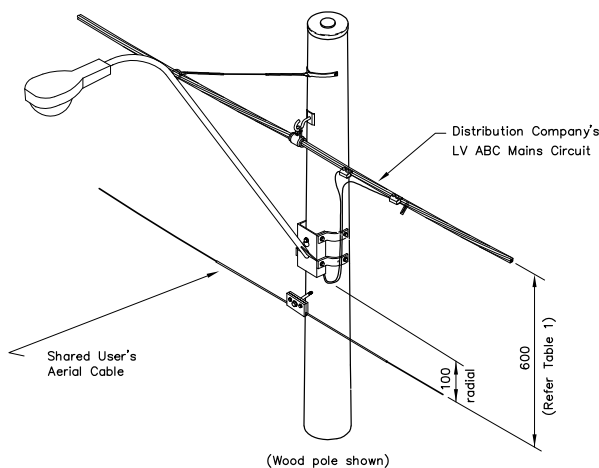
**Following notes to be read in conjunction with Table 3:**

1. In respect of the clearance listed above, where the State Road Traffic Authority or other authority or enactment allows a clearance which is less than the minimum clearance shown in Table 3 for Shared User's Equipment, then such lesser clearance allowed by the State Road Traffic Authority, or other authority or enactment where applicable, shall apply.
2. Minimum clearances shall apply at an ambient temperature of 35°C.

**Figure 1 – Minimum Clearance of Shared User's Aerial Cable from items of a Distribution Company's electrical system**

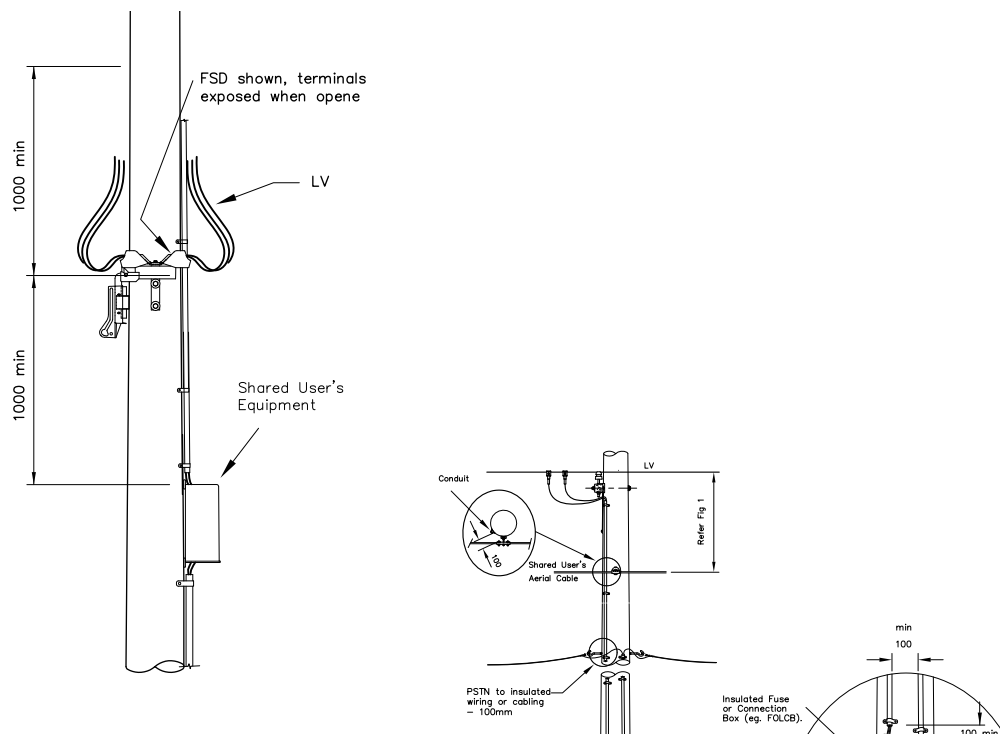


**Figure 1a - Clearance to LV Bare Mains**



**Figure 1b - Clearance to LV ABC Mains Circuit**

**Figure 2 – Minimum Clearance of Shared User's Aerial Cable from items of a Distribution Company's fuse/connection arrangement (FSD, FOLCB)**



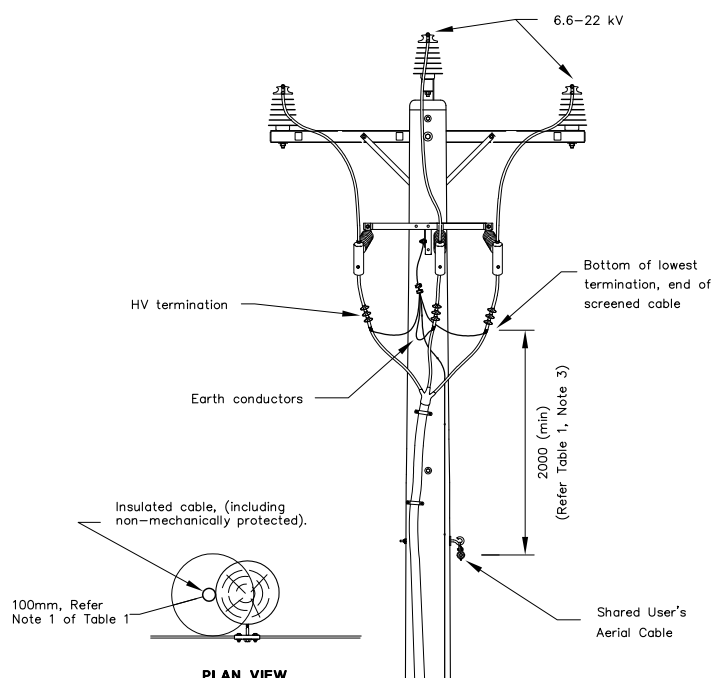
**Following notes to be read in conjunction with Figure 2:**

1. Various types of Fuse Switch Disconnecter (FSD) or other fuse/connection arrangements (e.g. FOLCB) are present in LV distribution networks and these are subject to:
  - Different methods of covering that may become dislodged, damaged or missing; or
  - Being left open for operational purposes.

In both instances potentially exposing Live Low Voltage terminals.

2. Clearances applicable to all Shared User's Equipment.
3. FSD - 1000mm minimum clearance below and above FSD.
4. FOLCB - 1000mm minimum clearance directly below FOLCB, and 100mm in any other direction.
5. Adequate clearances must be provided to ensure that FSD's and FOLCB's can be safely maintained and operated. Typically these devices are operated from ground level using an insulated stick and hence require unobstructed access of 1000mm minimum from below.
6. If the FSD is in an open state (tray open) or is in a state where exposed terminals are present, then the Shared User must contact the relevant Distribution Company should they wish to dress any telecommunication cable past the FSD. In this situation, the relevant Distribution Company must be contacted for arrangements to be made to apply insulating measures to the FSD before any work is undertaken.
7. Shared Users must maintain bare conductor clearances from open, deteriorated, incomplete or damaged distribution equipment. Any damaged or derivate equipment shall be reported to the relevant Distribution Company.
8. Shared User's devices that require operational access, such as amplifiers or connections, should be positioned to allow telecommunications workers to access their equipment while maintaining clearances as specified in this Code and the Safety Compliance Training Requirements for Telecommunications Work on VESI Network Operator Assets.

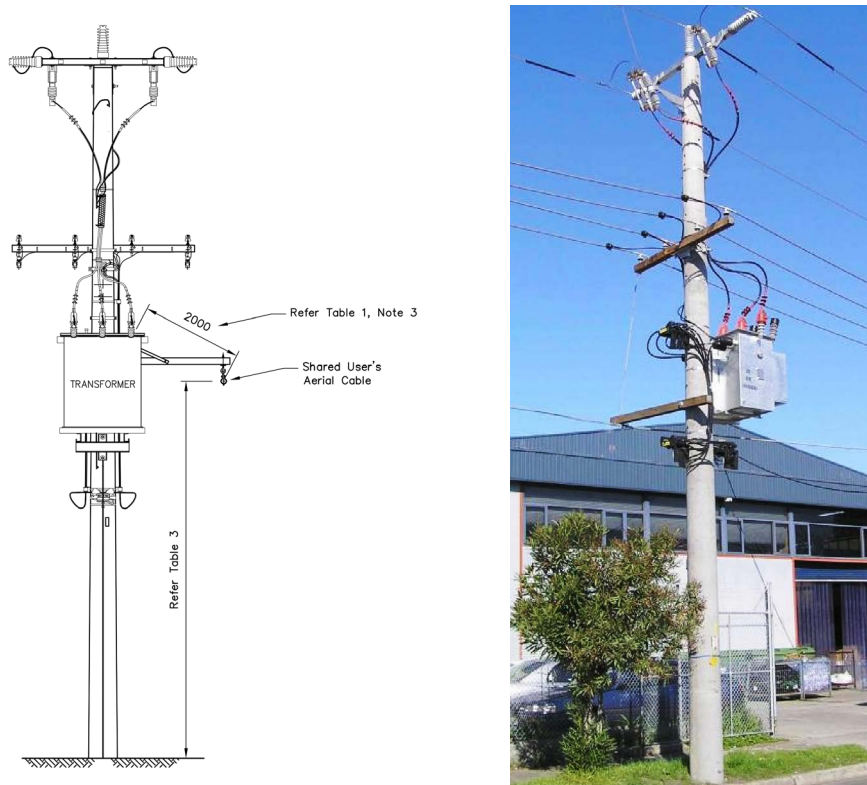
**Fig 3 – Minimum Clearances of Shared User's Equipment on a Cable Head Pole (up to & including 22 kV) from a Distribution Company's HV Bushing**



**Following notes to be read in conjunction with Figure 3:**

1. Typical HV (6.6, 11 & 22kV) cable head Pole (CHP) arrangement shown (RHS sketch).
2. There are many different types of High Voltage underground cable terminations found within the networks owned and operated by the Distribution Companies. It is important to understand where the nearest points considered to be 'High Voltage' occur on these various terminations. The general rule is that the nearest points of high voltage are the lower ends of porcelain bushings, non-tracking tubing or moulded non-tracking components that form essential parts of these terminations.
3. The exception to the above rule, is where old style inverted type terminations, refer photo above, have the nearest exposed high voltage below the actual termination where the bare or covered droppers loop from the HV line above to connect to the terminals of these underground cable terminations.
4. Shared User's devices that require operational access, such as amplifiers or connections, should be positioned to provide appropriate regulatory clearance for their workers.

**Fig 4 – Minimum Clearances of Shared User's Cable on a Substation Pole from a Distribution Company's HV Bushing**



**Following notes to be read in conjunction with Figure 4:**

1. Minimum clearance of 2000mm to base of the closest HV bushing.
2. If Shared User's employees need to work on their asset they have to maintain a minimum of 2000mm working clearance as per VESI Safety & Compliance Training Requirements for Telecommunications Work on Victorian Electricity Supply Industry (VESI) Network Operator Assets.
3. Shared User's service connections and equipment, such as multiports, amplifiers or connections are not permitted on poles supporting substation equipment.



## 6.2 Radio Frequency Equipment

### 6.2.1 Shared User's RF Equipment – Communication Antennae and Associated Equipment

An industry group involving Distribution Companies and mobile carriers has reviewed the inclusion of this type of equipment under this Code.

### 6.2.2 RF Related Application Forms (Preliminary/Formal Applications)

#### 6.2.2.1 Preliminary Application Form

The Shared User must submit to the relevant Distribution Company a Preliminary Application form (or other form as required by the Distribution Company), listed in Appendix B1. In preparation of the form the Shared User must consider all requirements within this Code.

Approval of any Preliminary Application Form is not deemed as final approval for installation of Shared Use equipment.

#### 6.2.2.2 Formal Application

Following the approval of the Preliminary Application, the Shared User must submit a Formal Application for assessment to the Distribution Company. A copy of the Formal Application form is listed in Appendix B2. Formal Application must be in accordance with Clause 2.2 of this Code.

### 6.2.3 Pole Suitability

#### 6.2.3.1 Attachment of Telecommunication Carrier – Macro Cell Facilities

All Shared User Equipment defined as a Macro Cell Facility is to be located above the Distribution Company's insulated electrical assets.

Poles with High Voltage or bare Low Voltage electrical assets are not suitable for Macro Cell Facility installations.

Requirements for Macro Cell Facility installations are to be discussed and agreed with the relevant Distribution Company.

#### 6.2.3.2 Attachment of Telecommunication Carrier – Small Cell Facilities

Below is a summary of requirements for attachment of a Telecommunication Small Cell facility.

- a. A Small Cell facility **can be installed** on Poles with the following Distribution Company Electrical Assets subject to clearances as specified in Table 4.
  - High Voltage conductors;
  - Low Voltage open bare wire;
  - Public light (bracket and luminaries);
  - Low voltage insulated overhead service;
  - Low voltage Aerial Bundled Cable (LV ABC);



- FOLCB (subject to design acceptance by Distribution Company)
- b. A Small Cell facility **cannot be installed** on Poles with the following Distribution Company Electrical Assets installed
  - High voltage cable head (cable termination Poles);
  - Low voltage cable head (cable termination Poles);
  - Fused switch disconnector box;
  - Substation;
  - Frangible slip based and impact absorbent Poles;
  - Hinged Pole;
  - Capacitor Bank;
  - HV Switches and Isolators;
  - Any Distribution Company communication equipment for e.g. Access Points, Control enclosures, Antennas etc.

Requests for multiple third party attachments are to be coordinated with the relevant Distribution Company.

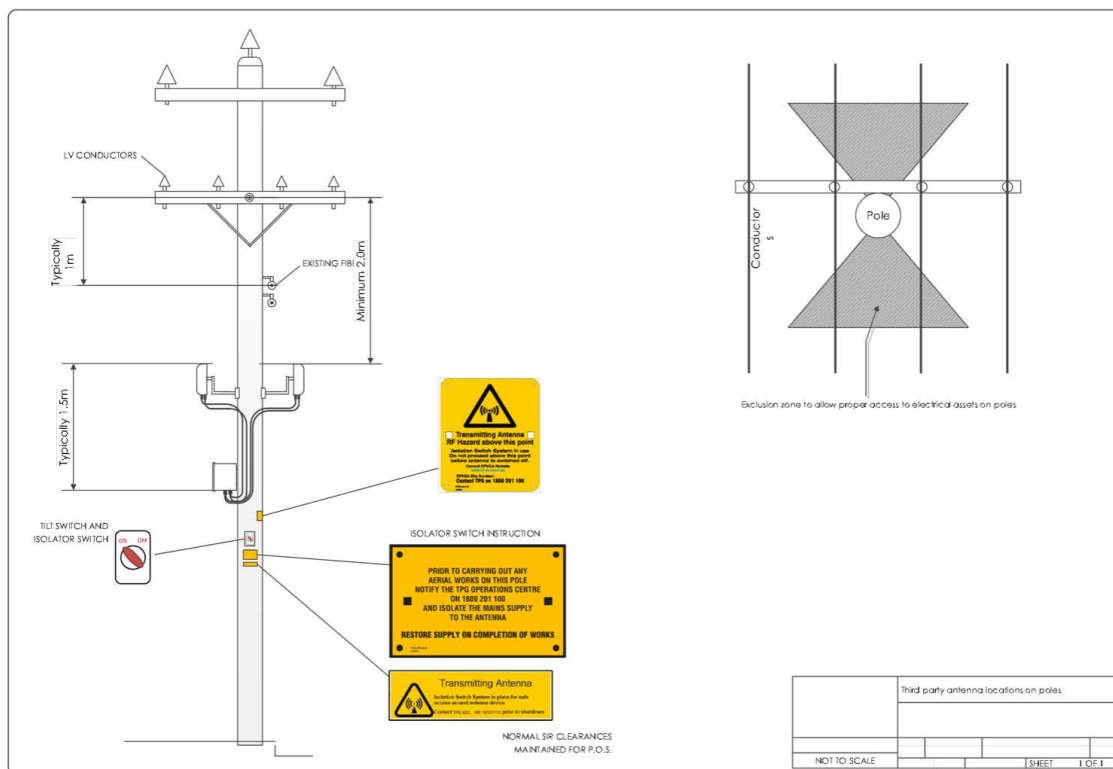
Table 4 – Minimum clearances between Items of Electricity Distribution System Company System and Shared User RF Equipment on Poles.		
Item of Electricity Distribution System (Minimum asset to asset clearances)	Shared User's RF Equipment	
	a. Shared Users equipment is below	b. Shared Users equipment (inc. Antenna) is above
Insulated LV Wiring (including insulated LV services) & UG Cable dressed on the Pole	100	100
FSD (in closed state) (1)	1000 (2)	500
FOLCB	1000	500
LV ABC Service 25-35mm <sup>2</sup>	1000	600
LV ABC Mains & Services O/H Circuit 95-150mm <sup>2</sup> services	1000	600
Earth & Supervisory O/H Circuitst	1000	1000
LV Bare Mains & Services O/H Circuit	2000 (3)	Not Allowed
6.6, 11, 22 kV O/H Circuits	2400	Not Allowed
66 kV O/H Circuit	3900	Not Allowed

**The following notes are to be read in conjunction with Table 4:**

1. Personnel clearance to exposed (open) FSD internal contacts requires a minimum of 1500 mm radially. Refer Table 1 of Blue Book
2. FSD may be in an open state. If it is in an open state, a personnel safe approach distance of 1 meter is required. Access to third party equipment needs to undertake in coordination with relevant t Distribution Business.

**Note:** Small Cell antenna attachment cannot be attached on Poles with FSDs

3. Including from the bottom of an open LV isolator, where installed.



**Figure 5: Sample Attachments Arrangement**

## 6.2.4 Radio Frequency Isolation Requirements

Unless otherwise agreed between the Parties, the Shared User must ensure that the Shared User's RF Equipment located on a Pole can be isolated on site by Distribution Company staff.

All Isolation Switch designs will be required to be assessed and approved by the Distribution Company.

For the avoidance of doubt, the Shared User must comply with the VESI RF isolation statement as shown in Appendix B3.

The Shared User is required to have documentation on site that provides relevant details and instructions to the relevant Distribution Company before proceeding with a power shutdown to a telecommunications facility. The following information will be on site:

- Signage;
- National Site Archive (NSA) reference number;
- Carrier Site ID number;
- Carrier Network Operations Centre phone number;
- Isolation procedures (located in Isolation Cabinet where possible).

## 6.2.5 Isolation Processes and Documentation

The Parties have agreed that where an isolation switch has been installed at a Radio Frequency site mounted on an electricity distribution Pole, the mobile carrier must ensure that Isolation Procedure Documentation is available in the metering cabinet on site, or displayed on signage located on the distribution pole. The signage must include all relevant details including:

- Carriers Network Operations Centre phone number;
- Equipment owners name and unique equipment number;
- Reference to the use of test device if required;
- Isolation switch instructions.

### 6.2.6 Where an Isolation Switch has not been Installed

An interim procedure for isolating mobile telephone telecommunication equipment is required during the initial roll out phase of the installation of Isolation Switches. During this interim phase, the Carriers have agreed that they will attend to each mobile telephone telecommunication equipment mounted on an electricity distribution Pole on call within 4 hours of receiving a request from a Distribution Company to attend and isolate the Facility. The Carriers have agreed that in Emergency situations they will attend to each site as a priority. The Distribution Company will provide reasonable notice of isolation requirements for planned works.

It is important that requests to Carrier Service Centres for on-site isolation of RF devices clearly communicate the OH&S requirements.

### 6.2.7 Signage Requirements

Unless otherwise agreed between Parties, the Shared User must ensure that the Shared User's Equipment located on a Pole is supported by appropriate signage. Signage for RF emitting devices is required to comply with the "Signage Requirements" shown below in Clause 6.2.10 RF Signage Requirements.

Signage at all new mobile telephone telecommunications facilities approved by the Distribution Company under an Application must comply with the Signage Requirements immediately after construction.

### 6.2.8 Update and Use of the National Site Archive

The mobile carriers have agreed that all mobile telephone telecommunication facilities will be entered into the National Site Archive ("NSA").

Distribution Company Pole owner and Pole Identification Numbers are essential and best endeavours will be used to include mobile carrier Site Names and Site Reference Number and GPS coordinates.

### 6.2.9 Construction Notification

A mobile telephone telecommunication facility Construction Notification Form must be completed by the Carrier and returned to the relevant Distribution Company notifying of the construction completion.

The Construction Notification Form is provided in the Appendix B4.

### 6.2.10 RF Signage Requirements

Agreed signage requirements for shared use Electricity Distribution Poles with Telecommunications antennas.

Poles are to display the following signs:

### 6.2.10.1 Standard Sign 1 – Antenna Warning Isolation Procedure

Purpose	To advise of antenna in place and Isolation procedure
Attachment	Metal strap or screws (wooden Pole only)
Mounted	Not more than 4.0 m from ground
Minimum Size	50 x 170mm or 40 x 136mm where appropriate
Requirement	Two signs where required, approach and departure side

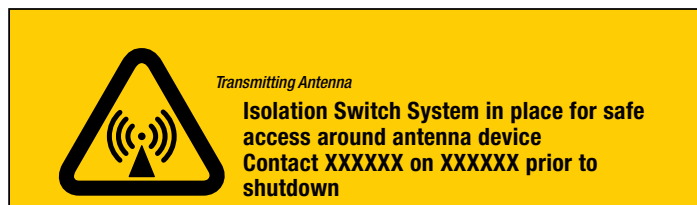


Figure 6 – Standard Sign 1

### 6.2.10.2 Standard Sign 2 – RF Hazard Proximity

Purpose	To advise of RF Hazard in close proximity
Attachment	Metal strap or screws (wooden Pole only)
Mounted	On Pole min 2m below antennas
Minimum Size	50 x 170mm or 40 x 136mm where appropriate
Requirement	Two signs where required, approach and departure side of Pole

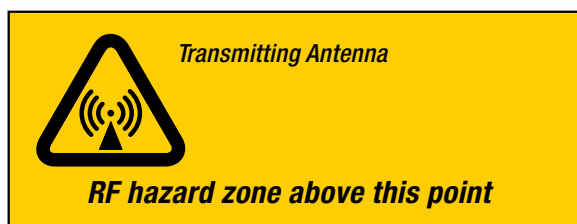


Figure 7 – Standard Sign 2 Macro Antenna



Figure 8 – Standard Sign 2 Micro Cell Antenna

### 6.2.10.3 Standard Sign 3 – Site Identification on Poles

Purpose	To clearly Identify Carrier and Site ID
Attachment	Fixing to concrete and steel must be by metal band. Concrete and Steel poles must not be drilled. Timber poles may be drilled for attachment via screws.
Mounted	Not more than 4.0 m from ground
Minimum Size	80mm x 120mm

Requirement	Where more than one carrier co-located on Pole each carrier must provide a sign. Signs must be mounted side by side so that both can be seen simultaneously.
-------------	--

**CARRIER:** XXXXXXXXX  
**NSA NO.:** XXXXXXXXX  
**CARRIER ID:** SITE NUMBER / NAME  
**CONTACT NUMBER:** XXXXXXXXX

**Figure 9 – Standard Sign 3**

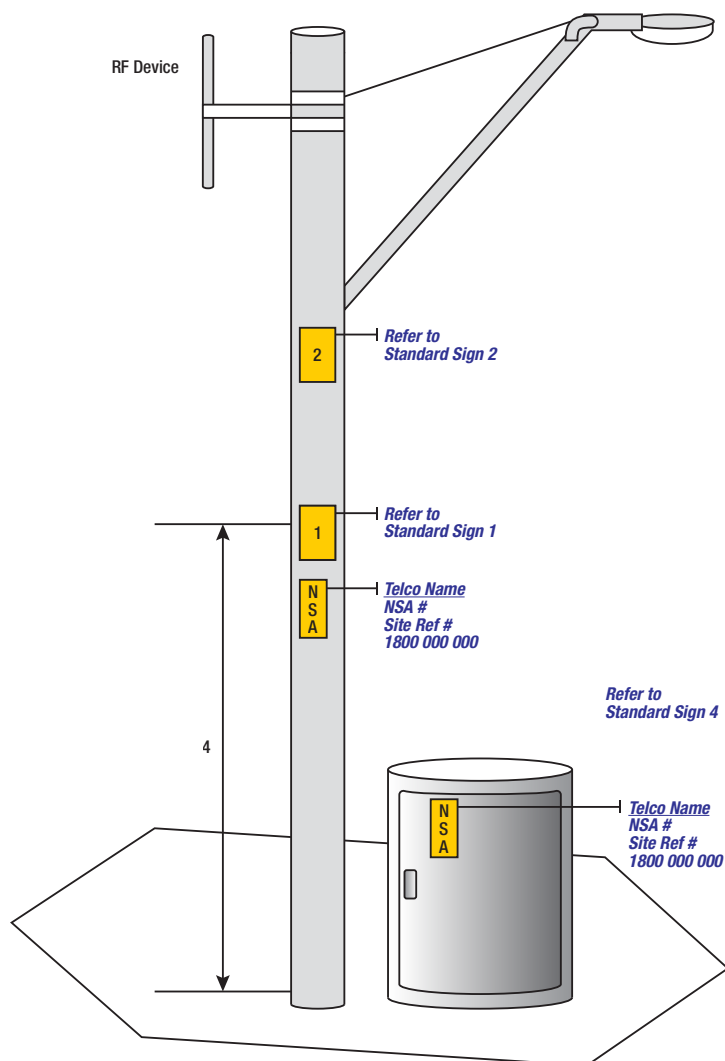
#### 6.2.10.4 Standard Sign 4 – Site Identification on Control Cabinet

Purpose	To clearly Identify Carrier and Site ID
Attachment	Fixing to concrete and steel must be by metal band. Concrete and Steel poles must not be drilled. Timber poles may be drilled for attachment via screws.
Mounted	At ground on the cabinet
Minimum Size	80mm x 120mm
Requirement	Where more than one carrier co-located on Pole each carrier must provide a sign. Signs must be mounted side by side so that both can be seen simultaneously.

**CARRIER:** XXXXXXXXX  
**NSA NO.:** XXXXXXXXX  
**CARRIER ID:** SITE NUMBER / NAME  
**CONTACT NUMBER:** XXXXXXXXX

**Figure 10 – Standard Sign 4**

## 6.2.10.5 RF Signage Arrangements for Attachment to Poles



**Figure 11 – Signage Placement**

## 6.3 Signs and Minor Attachments

### 6.3.1 Scope

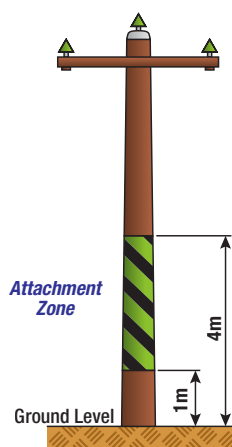
The following sections of the Code set out the minimum requirements which apply to the Attachment by a Shared User of its signs and other minor attachments to a Distribution Company's power or public lighting poles. In setting out these requirements the Code provides support to any Agreement established between a Distribution Company and a Shared User.

The Shared User must not install or perform any works on a Distribution Company Pole unless it has entered into a Facilities Access Agreement with the Distribution Company to permit installation of an Attachment.

### 6.3.2 Technical Conditions and Requirements

Unless otherwise approved by the Distribution Company the Shared User must ensure that the Attachment:

- a. Is not installed on the following Pole types;
  - i. Substation poles;
  - ii. High Voltage cable head poles (cable termination poles);
  - iii. Hinged poles;
  - iv. Fuse switch disconnecter (FSD) box poles, unless FSD is mounted within 1 m of the crossarm; and
  - v. Unserviceable poles;
- b. Does not interfere with or impair the use of the Distribution Company or third party access, use, function or operation of any Pole or equipment;
- c. Will only be affixed by using methods of attachments approved by the Distribution Company;
- d. Is attached within the Attachment Zone as described in the diagram below:



**Figure 12 – Allowable Attachment Zone**

Refer Table 5 for Shared User Equipment clearances of Attachment Zone

Where installed outside the Attachment Zone, as described in previous Clause 6.3.2.d, any installation work is only undertaken with the approval of the Distribution Company. In such cases a request must be made in writing to the Distribution Company in order for the Distribution Company to consider the matter on a case by case basis;

- e. At all times where the Attachment projects over the roadway, it shall be placed so that its lower edge meets the following clearances:



- i. 4.6m above the roadway for Local Traffic areas;
  - ii. 4.9m above the roadway for Secondary Roads and Collector roads; and
  - iii. 5.5m above the roadway for Primary Roads, Highways, Freeways and Tollways;
- f. Notwithstanding Clause 6.3.2.f, if placed so as to project beyond the diameter of the Pole the Attachment shall be placed so that its lower edge must not be less than 2.7m above the ground surface;
- g. Shall be securely fixed and be of such construction that under high wind conditions they cannot encroach within the limit specified above;
- h. Shall not exceed a total of 5 street sign Attachments to any one Pole including all third party Attachments unless specifically approved by the Distribution Company;
- i. Is safe and does not contain any sharp points, edges or burrs that could cause injury to a person or the perforation of any rubber insulation gloves that an employee of the Distribution Company or any contractor engaged by the Distribution Company may be required to wear when working on the Distribution Company poles;
- j. Does not create any risk to the safety of any persons as far as reasonably practicable;
- k. Shall be constructed and erected in such a way that they can be removed by the Distribution Company when the Distribution Company determines that the removal of the Attachment is required;
- l. Shall be permanently labelled to identify the Shared User as the owner of the Attachment;
- m. Works to be undertaken are only performed by trained persons who have been given clear written directions by the Shared User to perform the works; and
- n. Shall not readily enable persons to climb the Pole.

### 6.3.3 Existing Attachments

Where at the commencement date of a Facilities Access Agreement, any existing Attachments to the Distribution Company's poles do not comply with the Technical Conditions and Requirements set out in Clause 6.3.2, the Shared User agrees that:

- a. During its ordinary course of maintenance, it will at its own expense take all necessary steps to ensure that the existing Attachment comply with the Technical Conditions and Requirements. For the avoidance of doubt, the Shared User agrees that when it performs any works to an existing Attachment it will ensure that the Attachment and all their other Attachments affixed to that particular Distribution Company's Pole adhere to the Technical Conditions and Requirements;
- b. If it becomes aware of an existing Attachment which does not comply with the Technical Conditions and Requirements and which the Shared User considers is inaccessible to the Shared User due to electrical clearance requirements it will promptly contact the Distribution Company and the Distribution Company will at the cost of the Shared User arrange for the removal of the Attachment;
- c. If the Distribution Company identifies an existing Attachment which it considers does not comply with the Technical Conditions or Requirements, and poses an unacceptable risk to the health and safety of persons or interferes with the use, access, operation and function of the Distribution Company Pole then the Distribution Company may direct the Shared User at the Shared User's cost to immediately take all necessary steps to remedy the situation; and
- d. It will undertake a works program to ensure as a minimum all existing Attachments are removed from all Distribution Company Pole types excluded from use under Clause 6.3.2.a of the Technical Conditions and Requirements. The Shared User agrees to complete this works program within 5 years from the commencement date of the Facilities Access Agreement.

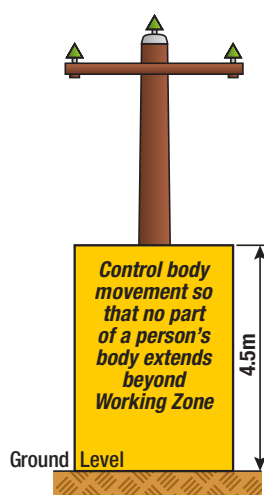
### 6.3.4 Recording of Attachments

Unless otherwise approved by the Distribution Company the Shared User must ensure that:

- a. Any Attachments including new and amendments to existing Attachments shall be recorded by the Shared User and include details such as the nature of the Attachment, location, the Distribution Company unique Pole Identification Number and where available details as to the owner of the Pole;
- b. The Attachments list is available to the Distribution Company upon request.

### 6.3.5 Personal Electrical Clearance Requirements

The Shared User must ensure that any works undertaken on the Distribution Company's Pole is carried out by persons who maintain personal electrical clearances by only undertaking work within the Working Zone as described in the following diagram.



**Figure 13 – Personal Electrical Clearance Requirements**

Notwithstanding the Working Zone indicated above, the Shared User must ensure that when work is performed within this zone, or where individual approval may have been granted to attach above the Attachment Zone (Refer to Clause 6.3.2.e), the Shared User must ensure that any attachment on the Distribution Company's Pole is carried out by persons who maintain the personal electrical clearances as outlined in the Electricity Safety (Installations) Regulations 2009.

### 6.3.6 Installation and Maintenance Requirements

Unless otherwise approved by the Distribution Company the Shared User must ensure that when maintaining, installing, removing, replacing, or repairing new or existing Attachments it:

- a. Must use only ladders or access platforms of a type recognised as suitable for work near electrical assets, and any access platform used must be accompanied by a current electrical test certificate;
- b. Will have in place safe work procedures which will as a minimum requirement:
  - i. Specifically relate to the tasks being undertaken;
  - ii. Be clearly readable and available on site at all times.
- c. Will regularly inspect the Attachments and maintain them in good condition;

- d. Will securely plug any hole on the Distribution Company's timber Pole created by the removal or adjustment of an Attachment using a method approved by the Distribution Company.

**Note:** A Safe to Climb test must be carried out prior to climbing each Pole.

<b>Table 5 – Minimum clearances between Items of Electricity Distribution System and Shared User Sign and Minor Attachments</b>	
<b>Item of Electricity Distribution System</b>	<b>Shared User's Equipment</b>
	Traffic light equipment, security lighting equipment, surveillance equipment, signs, etc.
Distribution Communications Cables	300
Insulated LV Wiring (including insulated LV services) & UG Cable dressed on the Pole (1)	100
Earth & Supervisory O/H Circuits	380
Bare LV Mains & Services (2) O/H Circuit	1000
FSD Figure (3)	300
FOLCB Figure (3)	300
LV ABC Mains O/H Circuit	600
6.6, 11, 22 kV O/H Circuits Note	2400
66 kV O/H Circuit Note	3900

**The following notes are to be read in conjunction with Table 5:**

- a. Minimum clearance between Shared User's Equipment and Distribution Company's equipment such as public lighting brackets, earthing conductors, insulated LV wiring, insulated LV boxes, etc. to provide a reasonable working clearance and prevent abrasion damage, is 100mm (Refer Fig. 1).
- b.
  - i. Where exposed blade type LV isolators or fuses are present refer to the relevant Distribution Company for insulating measures of these devices before access. Otherwise a clearance of 1400mm from bare LV mains is required.
  - ii. For any Shared User Equipment dressing past an FSD refer to the relevant Distribution Company for insulating measures of these devices. Refer to figure 2. In all cases adequate clearances must be provided to ensure that the Distribution Company's and Shared User's Equipment can be safely maintained and operated. These devices are typically operated from ground level using an insulated stick and require unobstructed access from below.
- c. Shared User equipment cannot be installed directly below FOLCB or FSD. It can be installed on the opposite side of pole to FOLCB or FSD as per the specified clearances.
- d. When an underground cable is present on a Pole, no item of Shared User's Equipment shall be attached to the Pole within the clearance distance stated. The Shared User's Equipment must not cross the existing cable (Refer Figs. 2 and 3). The Shared User

must not move or in any way adjust the cable to allow Attachment of the Shared User's Equipment.

- e. The above table clearances apply to Pole structures without HV equipment such as isolators, fuses, switches, etc. Where such equipment exists, additional clearances will be required. Refer to relevant Distribution Company for clearance requirements.
- f. These Minimum Clearances include provision for future subsidiary circuits. However, alternative clearances may be applicable. Refer to relevant Distribution Company for clearance requirements.
- g. Any attachment to the Pole (excluding cables and conduits dressed to the Pole) must not be lower than 2700mm from the ground level.
- h. Minimum clearance between telecommunications cables attached to the Pole shall be in accordance with CA C524:2013 – External Telecommunication Cable Networks (300mm between cables).
- i. Minimum clearance between telecommunications cables dressed on the Pole or aerial customer leads attached to the Pole shall be in accordance with CA C524:2013 – External Telecommunication Cable Networks (50mm between insulated cables and 100mm between non-insulated cables).

### 6.3.7 Right to Remove Attachments for Works

Where:

- a. The Distribution Company wishes to carry out maintenance work on the Distribution Company's Poles or replace or move the Distribution Company's Poles; or
- b. The Distribution Company considers there is an Emergency affecting health or safety; or
- c. The Attachment is affecting the operation or maintenance of the Distribution Company's assets;

Then the Distribution Company may:

- d. Detach or relocate the Attachment without giving prior notice to the Shared User; or
- e. Detach the Attachment and notify the Shared User. In circumstances where the Attachment is not damaged during detachment or removal, the sign shall be retained for the Shared User at an agreed location for a period of 5 business days. The Distribution Company will not be held liable for any costs associated with a damaged sign during removal or detachment; or
- f. By written request, require the Shared User to detach and/or relocate the Attachment within 5 business days at no cost to the Distribution Company.

## 6.4 Flags, Banners and other Decorative Attachments

### 6.4.1 Scope

The following sections of the Code set out the minimum requirements which apply to the attachment by a Shared User of its Flags, Banners or other Decorative Attachments to a Distribution Company's power or public lighting poles. In setting out these requirements the Code provides support to any Agreement established between a Distribution Company and a Shared User.

The Shared User must not install or perform any works on a Distribution Company Pole unless it has entered into a Facilities Access Agreement with the Distribution Company to permit installation of an Attachment.

Applications to install Attachments for promotional purposes must be lodged with the Distribution Company in accordance with Clause 6.4.2.

### 6.4.2 Applications

The Shared User is required to submit a written Application to apply for the installation of Attachments on the Distribution Company's poles. Unless otherwise agreed by the Distribution Company, the application must include as a minimum:

- a. Location and Pole Identification Number of the Distribution Company's Poles which the Shared User wishes to apply for shared use;
- b. Preferred mounting height of the Attachment for each Pole;
- c. Detailed dimensioned drawings of the Attachment the Shared User proposes to attach to the Distribution Company's Poles;
- d. Details as to the proposed method/s to be used for fixing the Attachment to the Distribution Company's Poles;
- e. Period of attachment including proposed installation and removal dates;
- f. A completed assessment from a suitably qualified person approved by the Distribution Company certifying:
  - i. The suitability of the Attachment (including the attachment method);
  - ii. The suitability of the Distribution Company's Pole for Shared Use; and
  - iii. That the Attachment will not interfere with or impair any Distribution Company or third party equipment;
- g. Details as to the wording and/or artwork to be displayed on the Attachment;
- h. Details as to the proposed installation and maintenance contractor including training and competency;
- i. Details as to the proposed inspection and maintenance program to be undertaken; and
- j. Any other particulars as may be requested by the Distribution Company.

### 6.4.3 Technical Conditions and Requirements

Unless otherwise approved by the Distribution Company the Shared User must ensure that the Attachment:

- a. Is not installed on the following Pole types;
  - i. Substation poles;
  - ii. Hinged poles;

- iii. All types of frangible poles;
- iv. High Voltage cable head poles (cable termination poles);
- v. High Voltage switch poles;
- vi. Fuse switch disconnecter (FSD) box poles, unless FSD is mounted within 1 metre of the crossarm;
- vii. Capacitor bank poles; and
- viii. Unserviceable poles;
- b. Does not interfere with or impair the use of the Distribution Company's or third parties access, use, function or operation of any Pole or equipment;
- c. Will only be affixed by using methods of attachment approved by the Distribution Company;
- d. Must be below the lowest Aerial Cable and meet the following electrical safety clearance requirements so that the highest point of any Attachment shall not be closer than:
  - i. 4.5m to the nearest bare 66kv conductor;
  - ii. 3.0m to the nearest bare 22kV, 11kV or 6.6kV conductor;
  - iii. 2.0m to the nearest HV Aerial Bundled Cable (22kV);
  - iv. 1.8m to the nearest bare LV conductor;
  - v. 1.4m to the nearest LV Aerial Bundled Cable; and
  - vi. 1.2m to the nearest Aerial earth or independently earthed Catenary cable;
- e. If placed so as to project over the roadway or in a position where the Attachment could be struck by a vehicle the Attachment shall be placed so that its lower edge meets the following Minimum Clearances:
  - i. 4.6m above the roadway for Local Traffic areas;
  - ii. 4.9m above the roadway for Secondary Roads and Collector roads; and
  - iii. 5.5m above the roadway for Primary Roads, Freeways and Tollways;
- f. If placed so as to project over pedestrian areas the Attachment shall be placed so that its lower edge must not be less than 2.7m above the ground surface;
- g. Shall be securely fixed and be of such construction that under high wind conditions it is unlikely to encroach within the limits specified above;
- h. Will not be strung between Distribution Company poles or to other structures;
- i. Is safe and does not contain any sharp points, edges or burrs that could cause injury to a person or the perforation of any rubber insulation gloves that an employee of the Distribution Company or any contractor engaged by the Distribution Company may be required to wear when working on the Distribution Company's poles;
- j. Does not create any risk to the safety of any persons as far reasonably practicable;
- k. Shall be constructed and erected in such a way that they can be removed by the Distribution Company when the Distribution Company determines that the removal of the Attachment is required;
- l. Shall be permanently labelled to identify the Shared User as the owner of the Attachment;
- m. Works to be undertaken are only performed by trained persons who have been given clear written directions by the Shared User to perform the works; and
- n. Shall not readily enable persons to climb the Pole.

#### 6.4.4 Record Keeping

Unless otherwise approved by the Distribution Company the Shared User must ensure that it will maintain records of:

- a. Its current Attachment locations and details; and
- b. Attachment inspections and maintenance undertaken;

And provide these records to the Distribution Company on request.

#### 6.4.5 **Personal Electrical Clearance Requirements**

The Shared User must ensure that any attachment on the Distribution Company's Pole is carried out by persons who maintain the personal electrical clearances as outlined in the Electricity Safety (Installations) Regulations 2009.

#### 6.4.6 **Installation and Maintenance Requirements**

Unless otherwise approved by the Distribution Company the Shared User must ensure that when maintaining, installing, removing, replacing, or repairing new or existing Attachments it:

- a. Must use only an insulated access platform of a type recognised as suitable for work near live electrical assets, and this access platform must be accompanied by a current electrical test certificate;
- b. Will have in place safe work procedures which will as a minimum requirement:
  - i. Specifically relate to the tasks being undertaken; and
  - ii. Be clearly readable and available on site at all times;
- c. Will regularly inspect the Attachments and maintain them in good condition; and
- d. Will securely plug any hole on the Distribution Company's timber Pole created by the removal or adjustment of an Attachment using a method approved by the Distribution Company.

#### 6.4.7 **Right to Remove Attachments for Works**

Where:

- a. The Distribution Company wishes to carry out maintenance work on the Distribution Company's Poles or replace or move the Distribution Company's Poles; or
- b. The Distribution Company considers there is an Emergency affecting health or safety; or
- c. The Attachment is affecting the operation or maintenance of the Distribution Company's assets;

Then the Distribution Company may:

- d. Detach or relocate the Attachment without giving prior notice to the Shared User; or
- e. Detach the Attachment and notify the Shared User. In circumstances where the Attachment is not damaged during detachment or removal, the Attachment shall be retained for the Shared User at an agreed location for a period of 5 business days. The Distribution Company will not be held liable for any costs associated with a damaged sign during removal or detachment; or
- f. By written request, require the Shared User to detach and/or relocate the Attachment within 5 business days at no cost to the Distribution Company.



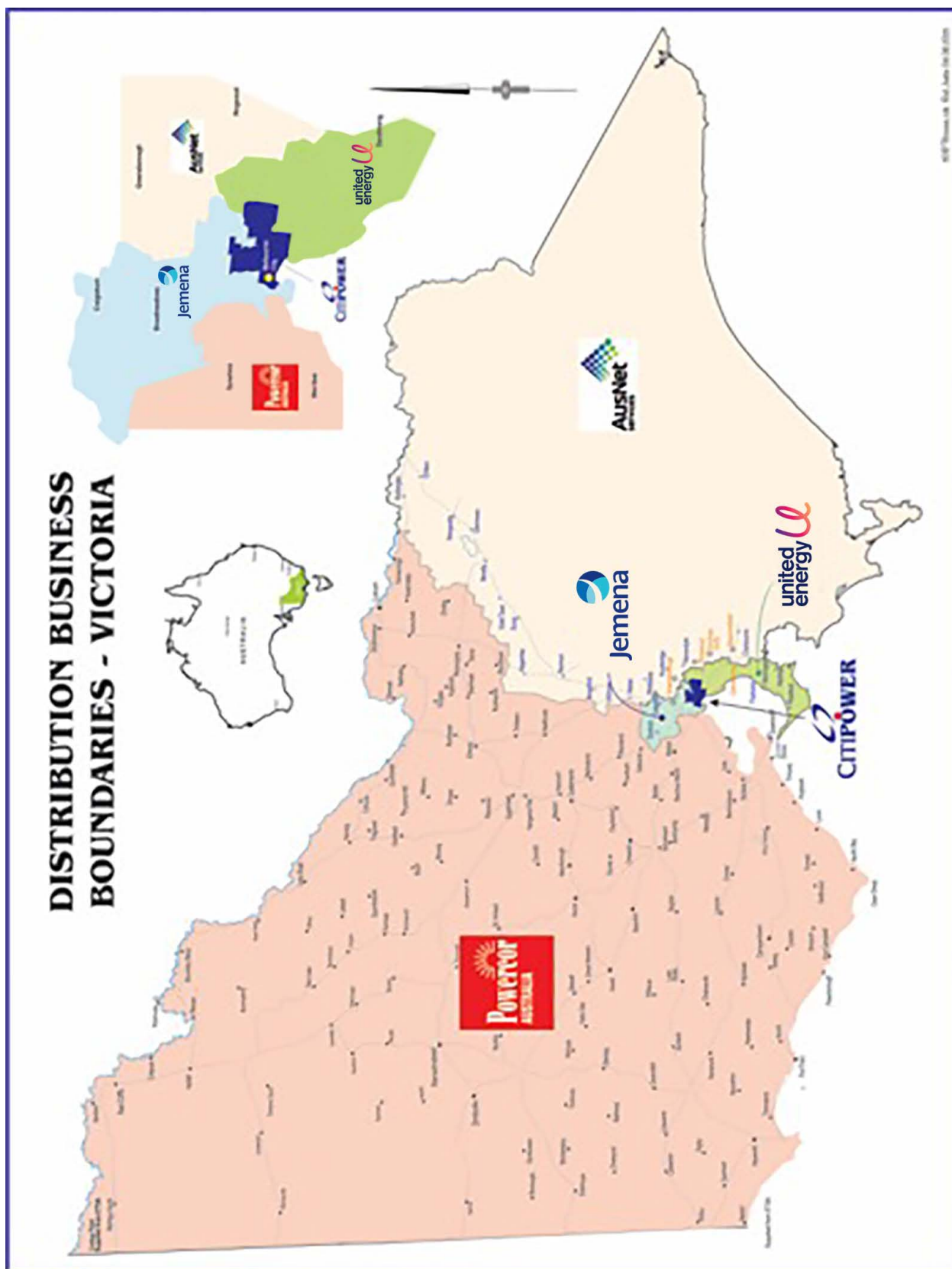
# PART 7: APPENDICES

## CONTENTS

7.1	Distribution Company Boundaries .....	1
7.2	Distribution Company Fault and Emergency Contacts.....	2
7.3	Forms .....	3
7.4	VESI RF Isolation Statement.....	11



## 7.1 Distribution Company Boundaries



**Figure 14 – Distribution Company Boundaries**

## 7.2 Distribution Company Fault and Emergency Contacts

### **CitiPower**

131 280

[www.citipower.com.au](http://www.citipower.com.au)

### **AusNet Services**

131 799

[www.ausnetservices.com.au](http://www.ausnetservices.com.au)

### **Powercor**

132 412

[www.powercor.com.au](http://www.powercor.com.au)

### **Jemena Electricity Network**

131 626

[www.jemena.com.au](http://www.jemena.com.au)

### **United Energy Distribution**

132 099

[www.ue.com.au](http://www.ue.com.au)

## 7.3 Forms

EXAMPLE ONLY Confirm form requirements with relevant Distribution Company prior to completing



### APPLICATION FOR SHARED USE OF POLE

(Read in conjunction with Shared Use of Poles Code)

PART 1 (Shared User to Complete)		APPLICATION NO.	
<b>1. SHARED USER DETAILS (Please Print)</b>			
Name			
Address			
Postcode			
Contact Person			
Phone Number			
Email Address			
<b>2. POLE FOR WHICH SHARED USE IS REQUIRED</b>			
Pole ID No. (Clauses 2.2a) and 6.1.1 (Item 1))			
Property No..			
Street/Road			
City/Suburb			
Postcode			
<b>3. DETAILS OF SHARED USE</b>			
Date Required	/ /		
Category (Clauses 6.1.1 ( ) or 6.1.2 ( ))			
Has Fly-Off Point only been used? (Clause 2.2 b))	YES	NO	
Number of Fly-Off Points (Clause 2.2 b iv))			
Number of Aerial Customer Leads (Clause 2.2 b iv))			
<b>4. ADDITIONAL INFORMATION</b>			
For the following items the Shared User shall indicate if additional information is provided or whether provision of this information is considered as not applicable (N/A).	Please tick the relevant boxes below:		
Map (Clause 6.1.1 [Item 2])	YES	NO	N/A
Method of Attachment (Clause 2.8)	YES	NO	N/A
Equipment to be Attached (Clause 6.1.1 [Item 6 a])	YES	NO	N/A
Cable/Conductor Type (Clause 6.1.1 [Item 6 a])	YES	NO	N/A
Earth Potential Rise mitigation (Clause 6.1.1 [Item 6 b])	YES	NO	N/A
Low Frequency Induction mitigation (Clause 6.1.1 [Item 6 c])	YES	NO	N/A
Earthing System details (Clause 6.1.1 [Item 6 b])	YES	NO	N/A
Make Ready Works (Clause 6.1.1 [Item 5])	YES	NO	N/A
Calculation results (Clause 6.1.1 [Item 12])	YES	NO	N/A
Back-feeding details (Clause 6.1.1 [Item 6 d])	YES	NO	N/A



## APPLICATION FOR SHARED USE OF POLE

5. DECLARATION			
<p>I _____, an authorised officer of the Shared User, hereby certify that the information contained in this Application is true and correct and is not misleading or deceptive.</p> <p>I hereby acknowledge that the Distribution Company will:</p> <p>(a) use the information in this Application to:</p> <p>(i) make appropriate decisions in relation to the Application; and</p> <p>(ii) carry out its necessary investigations in relation to the Pole designs including whether the Make Ready Works are required;</p> <p>(b) be relying upon this Application to make a number of decisions concerning the Application and Shared Use of Pole.</p>			
Signature of Shared User		Date	/ /
<p>Note: Process of Application</p> <p>The following steps will occur in relation to an Application lodged by a Shared User.</p> <ol style="list-style-type: none"> <li>1. The Distribution Company will, at cost of the Shared User, check the suitability of the Pole for Shared Use and will advise the Shared User of any Make Ready Works required.</li> <li>2. Where no Make Ready Works are specified in the Application and the Distribution Company accepts the Application then an invoice for the licence fee will be issued and, when paid, a licence to permit Shared Use of the Pole by the Shared User will be issued.</li> <li>3. Where Make Ready Works are required and the Application is accepted then the Make Ready Works will be carried out by the Distribution Company.</li> <li>4. After the Make Ready Works have been completed, an invoice for Make Ready Works, the licence fee and any other fees will be issued to the Shared User. Upon payment a licence will be granted.</li> </ol>			

## PART 2 (Distribution Company to Complete)

1. APPLICATION PROCESSING (Please Print)			
Processing Officer			
Phone No..			
Email Address			
Date Application Received	/ /		
Date Applicant Notified	(i) Application accepted	/ /	
	(ii) Application rejected	/ /	
	(iii) Make Ready Works costs	/ /	
	(iv) Other applicable costs	/ /	
Date when...	(i) Make Ready Works costs accepted by Applicant	/ /	
	(ii) Other applicable costs accepted by Applicant	/ /	
	(iii) Make Ready Works commenced	/ /	
	(iv) Make Ready Works completed	/ /	
	(v) Make Ready Works invoice sent	/ /	
	(vi) Other invoices sent	/ /	
	(vii) All payment(s) received	/ /	
	(viii) Licence issued	/ /	
	Date	/ /	



# PRELIMINARY POLE ASSESSMENT

INSTALLATION OF RADIO FREQUENCY TELECOMMUNICATIONS  
FACILITIES ON ELECTRICITY DISTRIBUTION POLES

Date of this Preliminary Enquiry	/	/
----------------------------------	---	---

1. DETAILS OF PARTY MAKING ENQUIRY			
Carrier			
Contact Person			
Company Name (of contact person if not the Carrier)			
Address (Business)		P/Code	
Address (Postal)		P/Code	
Email			
Phone Number		Mobile	

2. CARRIER AUTHORISATION FOR THE APPLICATION			
Contact Person			
Signature			
Company Name			
Address (Business)		P/Code	
Address (Postal)		P/Code	
Email			
Phone Number		Mobile	

3. CONTACT FOR STRUCTURAL INFORMATION			
Contact Person			
Company Name			
Address (Business)		P/Code	
Address (Postal)		P/Code	
Email			
Phone Number		Mobile	

4. AGREEMENT/LICENCE UNDER WHICH ENQUIRY IS MADE	
Name of Agreement/Licence	
Parties to the Agreement/Licence	

5. POLE FOR WHICH THE ENQUIRY IS MADE				
Pole Number				
Pole Type (wood/concrete/steel/other)	Wood	Concrete	Steel	Other:
Street/Road Name			Nearest House No...	
Suburb			P/Code	
Melways Ref			<i>* Please attach to this application a photo of the site</i>	



## PRELIMINARY POLE ASSESSMENT

6. PROPOSED TELECOMMUNICATIONS FACILITY DETAILS	
a. Type of Facility: (Tuft/Panel/Omni/Other)	
b. Facility Classification: (Small Cell/Macro Cell/Other)	
c. Carrier Site Reference Number	
d. Carrier Site Name	

7. ENQUIRY SUMMARY	
We seek confirmation from the Distribution Company on the suitability of the above Pole for Shared Use to install the following radio frequency telecommunications facility.	
Our initial site inspection has indicated that the following Make Ready Works will/may be required to be undertaken prior to the Pole being suitable for use and that approval of the Pole will be subject to a formal application.	
Can you please provide a Preliminary Pole Assessment approval based on the above information. Subject to this preliminary approval, a formal application will be submitted to you.	
Signature (Carrier)	
Name	

OFFICE USE ONLY	
(The Distribution Company) provides preliminary approval to (the Carrier) to proceed with a formal application for the above site. Please find attached the Pole Licence Application Form.	
Signature (Carrier)	
Name	

# POLE LICENCE APPLICATION

INSTALLATION OF RADIO FREQUENCY TELECOMMUNICATIONS  
FACILITIES ON ELECTRICITY DISTRIBUTION POLES

Date of Preliminary Pole Assessment Approval	/ /
Date of this Application	/ /
<b>Application Reference Documents</b> Applications should be read in conjunction with the: <ul style="list-style-type: none"> <li>• Relevant Carrier and Distribution Company Licence Agreement,</li> <li>• Memorandum of Understanding (Carriers and Distribution Companies)</li> <li>• Carriers and Distribution Companies agreed Operations Manual</li> <li>• Code of Engineering Practice for Shared Use of Poles</li> </ul>	

APPLICATION NO.

## OFFICE USE

FILE NO.

DATE RECEIVED

/ /

1. APPLICANT DETAILS			
Applicant (Carrier)			
Contact Person			
Company Name (of contact person if not the Carrier)			
ABN			
Address (Business)		P/Code	
Address (Postal)		P/Code	
Email			
Phone Number		Mobile	
2. AGREEMENT/LICENCE UNDER WHICH APPLICANT IS APPLYING			
Name of Agreement/Licence			
Parties to the Agreement/Licence			
3. POLE FOR WHICH LICENCE IS REQUIRED			
Pole Number:			
Pole Type (wood/concrete/steel/other)			
Street/Road Name:		Nearest House No.	
Suburb		P/Code	
Melways Ref			
4. PROPOSED TELECOMMUNICATIONS FACILITY DETAILS			
a. Type of Facility (Tuft/Panel/Omni/Other)			
b. Facility Classification (Small Cell/Macro Cell/Other)			
c. Carrier Site Reference Number			
d. Carrier Site Name			
e. Allocated National Site Archive Reference Number			
f. Isolation Switch Make:		Model No.	
g. Does this Isolation Switch make/model meet operations manual standard? (Refer to VESI RF Isolation Statement for Third Party RF Devices Attached to VESI Distributor's Assets)	YES		NO



## POLE LICENCE APPLICATION

4. PROPOSED TELECOMMUNICATIONS FACILITY DETAILS continued			
h. Has this isolation unit been approved by the distributor? (if yes, provide copy of approval letter)		YES	NO
i. Will the facility have battery back up?		YES	NO
j. Will signage meet operations manual requirements? (Refer to 'Shared Use Electricity Distribution Poles with Telecommunication Antennas')		YES	NO
k. Will the facility be metered? (If no, provide details of Amps and Power consumption of the relevant facility)		YES	NO
l. Will use of the facility be shared with another existing carrier (If yes, provide details)		YES	NO
5. DESIGN SUMMARY			
a. Are any Make Ready Works required? (If yes, provide summary below, including details such as Pole change overs, bundling or undergrounding of electricity assets, etc.)		YES	NO
b. Does the design comply with all clearances to electrical assets set out in the Code of Engineering Practice? <i>Provide technical drawings which specify the location of the RF equipment in relation to the electrical distribution assets</i>		YES	NO
c. RF EME Drawings Submitted? <i>Provide detailed site specific information as to the emission of radiofrequency electromagnetic energy for each device, including exclusion zones for both occupational and non-occupational workers in accordance with the ARPANSA Radiation and Protection Standard (Maximum Exposure Levels to Radio Frequency Fields 3kHz to 300GHz)</i>		YES	NO
d. Has a structural assessment of the Pole been conducted? <i>Provide relevant certificate or calculations as required by the Distribution Company</i>		YES	NO
6. APPLICATION DECLARATION			
I as the undersigned Applicant hereby certify that the information contained in this application complies to the best of my knowledge, with the application reference documents listed on this form and is true and correct and not misleading or deceptive in anyway.			
Signature (Carrier)			
Name			
Position Held		Date	/ /





## POST CONSTRUCTION DETAILS

INSTALLATION OF RADIO FREQUENCY TELECOMMUNICATIONS  
FACILITIES ON ELECTRICITY DISTRIBUTION POLES

Date of Submission	/	/
Date of Pole Assessment Approval	/	/
Date of Construction Completion	/	/

### OFFICE USE

FILE NO.	
DATE RECEIVED	/ /

### 1. APPLICANT DETAILS

Applicant (Carrier)			
Contact Person			
Company Name (of contact person if not the Carrier)			
ABN			
Address (Business)		P/Code	
Address (Postal)		P/Code	
Email			
Phone Number		Mobile	

### 2. POLE FOR WHICH LICENCE IS REQUIRED

Pole Number:			
Pole Type (wood/concrete/steel/other)	Wood	Concrete	Steel
Confirm final Pole Number on site is same as closeout documentation	YES		NO
Street/Road Name:		Nearest House No.	
Suburb		P/Code	
Melways Ref			

### 3. INSTALLED FACILITY DETAILS

a. Type of Facility (Tuft/Panel/Omni/Other)			
b. Facility Classification (Small Cell/Macro Cell/Other)			
c. Carrier Site Reference Number			
d. Carrier Site Name			
e. Allocated National Site Archive Reference Number			
f. Isolation Switch Location	Pole	In Ground Cabinet	Meter Box
g. Does this Isolation Switch make/model meet operations manual standard? (Refer to VESI RF Isolation Statement for Third Party RF Devices attached to VESI Distributor's Assets)	YES		NO



## POST CONSTRUCTION DETAILS

4. CHECKLIST OF SITE COMPLETION DOCUMENTATION	
1. As Built Drawings A3	2. Photos (incl. signage)
3. Isolation Switch Procedures	4. EME Compliance Materials
5 Other	

5. STATUS OF TENURE AGREEMENT DOCUMENTATION		
Fees Paid	YES	NO
Site Agreement Executed	YES	NO
Comments		

6. CARRIER CONTACT DETAILS POST CONSTRUCTION	
Carrier Contact for site payment issues	
Carrier Contact for ongoing operational issues	

7. DECLARATION			
I as the undersigned Applicant hereby certify that the information contained in this application complies to the best of my knowledge, with the application reference documents listed on this form and is true and correct and not misleading or deceptive in anyway.			
Signature (Carrier)			
Name			
Position Held		Date	/ /

## 7.4 VESI RF Isolation Statement

# **VESI**

## **VESI RF ISOLATION STATEMENT**

FOR THIRD PARTY RF DEVICES ATTACHED TO VICTORIAN  
ELECTRICITY SUPPLY INDUSTRY DISTRIBUTOR'S ASSETS

### 1 EXECUTIVE SUMMARY

#### 1.1 Third Party RF Equipment

All sites where Third Party RF equipment is attached to electricity distributor's assets shall have a Radio Frequency (RF) isolator which is readily accessible to electrical Distribution Company workers.

#### 1.2 ISOLATION DEVICES

All isolation devices shall meet the requirements specified in section 4 of this document.

### 2 DEFINITIONS

**ARPANSA** – Australian Radiation Protection and Nuclear Safety Agency

**Breaking Device** – means the actual component in the isolator circuit that opens when the Isolator is operated.

**Control Circuit** – The control circuit refers to any circuit that is used to control the operating state of the breaking device in the RF Signal Circuit.

**Electricity Distributor Asset** – Is any structure or piece of equipment owned by the Electricity Distributor.

**Isolation** – refers to the process of disconnecting the RF Equipment from any possible sources of RF signal by means which will prevent unintentional re-activation of the RF Equipment and which is assessed as a suitable step in the process of making safe for access purposes.

**Isolator** – means the device which when operated as part of the isolation process, will produce an open position, between all sources of RF signal and equipment mounted on Electricity distributor's asset.

**Removable Link** – means a component such as a solid link or fuse that may be removed from the circuit while de-energised to prevent accidental re-energising.

**RF Equipment** – refers to any third party asset attached to an electricity distributor's asset, which is able to emit radiofrequency fields in excess of exposure levels for the general public, as defined by ARPANSA standard "Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300 GHz" (RPS3).

**RF Signal Circuit** – The RF signal circuit refers to the circuit in which the signal travels to the RF Equipment from the third parties signal generation equipment.

**Shall** – is to be interpreted as "mandatory"

**Third Party** – Any party applying to install RF emitting equipment on VESI assets.

**VESI** – Victorian Electricity Supply Industry

### 3 PURPOSE / SCOPE

The purpose of this document is to define the location of the electrical and mechanical switching apparatus used in the process for isolating third party RF devices attached to electricity distributors' assets.

This requirements statement applies to all Third Party RF Equipment attached to the electrical distributor's assets.

### 4 REQUIREMENTS

All sites where RF equipment is attached to the electricity distributors' assets shall have an RF Equipment isolator.

#### 4.1 RF Equipment Isolators

All RF Isolators shall have:

- Adequate signage to positively identify the RF Equipment to be isolated.
- Clear consistent RF isolation instruction documentation such that persons attending the site will have no difficulty in operating the device.
- One isolation point for all of the RF Equipment attached to the electricity distributor's asset per carrier.
- A means of positive isolation. Methods of positive isolation include:
  - Use of breaking device that can be locked, tagged or has a removable link such that the broken connection cannot be accidentally re-closed on the RF signal circuit. Locks, tags or removable links on a control circuit are not adequate for isolation.

#### 4.2 Breaking Devices that Cannot be Locked

Breaking devices on the RF signal circuit that cannot be locked, tagged or removed may be used if a removable link between the breaking device and the RF Equipment is installed. The breaking device in this situation shall provide a method to identify when the circuit has opened, to prevent hazardous situations that may arise from removing energised links.

#### 4.3 RF Isolators Mounted within the Owner's Equipment

RF Isolators shall be mounted within the owner's equipment and not to be located on the electrical distributor's asset unless agreed to by the relevant electrical Distribution Company.

#### 4.4 Independent Earthing System.

All electrical installations for RF sites shall have an earthing system that is independent to the electrical distributor's earthing system.

#### 4.5 Components Located on the Electrical Distribution Asset.

Components located on the electrical distribution asset shall not constitute an 'Electrical Installation' as defined in the Electricity Safety Act 1998.

#### 4.6 Protection of public from accidentally moved RF Equipment

There is a preference for any site where any Third Party RF Equipment is installed that some means of isolating the RF Equipment immediately in the event of an accidental change in the location of the RF Equipment and thus avoid any potential hazard to the general public.

#### 4.7 Variations

Variations to this requirements statement must be authorised by the operator of the electrical distributor's asset.