

Abthorpe Broadband Association Ltd.

Bringing Broadband to the community since 2003.

**Tove Valley Superfast Broadband
Health & Safety Policy and Risk Analysis
February 2022**

Contents

1. General Statement of Policy	2
2. Responsibilities	2
3. Review	2
4. Definitions	3
5. Scope of Operation	3
6. Outline of Work Carried Out	3
7. Accidents	4
8. Specific Safety Procedures	4
Warning Labels	4
Wireless Equipment	4
Fibre-optic Cables	4
Installation of Wireless Equipment	4
Civil Works	5
9. Risk Analysis	5
Site Surveys	5
Installation Work	6
Maintenance and Operation	7
Computer and Desk Based Work	7
Storage	7

Author: Keith Fenwick

Reviewed byTim NewtonChairman..... 1 December 2023

1. General Statement of Policy

ABbA's policy is to provide and maintain safe and healthy working conditions, equipment and systems of work for the Team, and to provide such information, training and supervision as they need for this purpose.

The allocation of duties for safety matters and the particular arrangements which are made to implement the policy are set out below.

It is recognised that all involved are skilled at installations and working safely. Installations have a heightened risk if working alone and in these should be avoided if there is an enhanced risk (e.g. working at height). All volunteers have the right not to complete or postpone an installation if they consider it is not safe.

ABbA's policy must comply with all relevant national legislation and must be reviewed and, where necessary updated, when changes come into effect. When changes of a temporary nature occur in regulations governing ABbA's work, a separate risk analysis should be undertaken and circulated to all members of the Team.

This policy will be issued to all members of the Team who must acknowledge receipt and abide by this Policy.

2. Responsibilities

Overall responsibility for health and safety in ABbA rests with

Responsible officer (RO)	Eric Malcomson, Director
Deputy Responsible Officer	Peter Watkins, Director
Accident Investigation	Eric Malcomson
Keeper of Accident Book	Richard Tomalin, via team@tovevalley.net

The Responsible Officer (referred to as "**RO**" in the text), and in his absence his Deputy, has the duty to ensure that this policy is carried out at the various locations where the Team operates.

All members of the Team are responsible for co-operating with others to achieve a healthy and safe workplace and to take reasonable care of themselves and others.

Whenever an accident occurs or a member of the Team notices a health or safety problem which they are not able to put right they must immediately report it to the RO.

Regular communications provide consultation between members of the team.

3. Review

The Policy will be brought up to date when any significant change is made to methodologies used by the team or to the activities undertaken. To ensure this, the policy and the way in which it has operated will be reviewed every year.

In addition, the Policy will be reviewed as noted in section 1 above.

4. Definitions

ABbA	Abthorpe Broadband Association Limited
Member	A member of Abthorpe Broadband Association Limited
RO	Responsible Officer,
Team	The executive members and directors of ABbA and any other person acting with their authority. All are volunteers and are not paid for the work they perform for ABbA.
TVB	Tove Valley Broadband, the name of the service which Abthorpe Broadband Association Limited provides broadband connection.

5. Scope of Operation

Abthorpe Broadband Association Limited provides Internet service via fibre-optic cable and wireless to Member's premises. The service has become known as Tove Valley Broadband (TVB).

The work of installation and maintenance is carried out by the Team. Where any work is beyond their competence, professional services will be employed.

This document assesses the general risks faced by volunteers and the procedures adopted to mitigate such risks.

6. Outline of Work Carried Out

The fibre-optic and wireless network distributes service to several villages from a common point which is served under contract by a third party.

TVB undertakes the installation and maintenance of the network, either directly by the Team or using suitably qualified sub-contractors. The distribution network consists of a mixture of fibre-optic and wireless links between villages and within villages. Wireless equipment is generally mounted at eaves or roof level.

Wireless customer premises equipment (CPE) consists of an outside unit, typically at roof level, mounted on a TV pole or wall fixing. From this an Ethernet cable is run to a suitable internal termination point close to a power source. Ethernet cabling is used between internal and external equipment and this carries low voltage power to the external units. Fibre-optic customer equipment consists of a protected fibre-optic cable entering the property and being terminated in a special box fixed to an internal wall.

Equipment consists only of field replaceable items. Maintenance consists of replacing any failed items or replacing/repairing broken Ethernet or fibre-optic cables.

Training is provided for all Team members in the installation of the equipment and assessing the risks involved. Installation and maintenance of fibre-optic connections require additional training from that provided for wireless installations.

Subcontractors will be employed on condition that they carry out their own risk assessment and have the necessary insurance policy in place.

7. Accidents

If any accident occurs which involves personal injury, no matter how slight, details must be recorded in the Accident Book. If a serious accident occurs involving death or serious injury, it will be reportable by the RO under RIDDOR (see <http://www.hse.gov.uk/riddor/>).

The RO must review the Accident Book every 3 months and determine if corrective action is required to avoid similar occurrences in the future.

A basic First Aid kit should be carried by anyone undertaking installation and maintenance.

8. Specific Safety Procedures

Warning Labels

All Uninterruptable Power Supplies will be marked with warning labels stating that dangerous voltages may be present even when mains power or the unit is switched off.

Except when within manholes, all units with fibre-optic connections must bear a laser warning label.

Wireless Equipment

The outdoor wireless equipment used is potentially more dangerous than domestic equipment. Do not work in front of this equipment when it is operational. Do not mount the equipment where anyone can stand in front of it. House walls provide sufficient attenuation to prevent harm to anyone inside, but avoid locations which are level with anywhere people sit or sleep.

Regulations now require all units to be at least 800mm from any person. The attenuating affect of brick walls is not taken into account. Equipment should therefore be placed at least 3m above ground level on single storey buildings and at least at the highest floor gutter level on other buildings.

Fibre-optic Cables

Fibre-optic cables carry laser beams which have the potential to cause blindness if shone directly into the eye. The splicing process generates small fragments of glass which can cause skin irritation or eye damage. Team members handling fibre-optic cables will be given appropriate training.

Installation of Wireless Equipment

TVB wireless equipment requires line of sight between equipment. Equipment is often mounted high on roofs, although in many cases it can be mounted at gutter level. Choose a location which minimises the use of ladders or boom lifts.

Ladders must only be used by Team Members who feel confident to do so and who have been trained and hold a valid training certificate. An aerial fitter or boom lift (cherry picker) should be employed if necessary and Members should feel under no pressure to install where they perceive a risk. Operators of boom lifts must have relevant training.

When anyone is on a ladder, another person must be present at the foot of the ladder and should 'foot' it if necessary. When your feet are above head height, ensure that three points of contact with the ladder are maintained at all times.

Use the right ladder for the job. It must be long enough to enable the work to be carried out without leaning too far from the ladder. Use a stand-off to avoid contact with gutters. Use foot pads if necessary to ensure equal pressure on both feet of the ladder.

The ladder should be placed at 75° to the wall – divide the length of the ladder by 4 to obtain the distance between the wall and the base of the ladder. If roof ladders are used, ensure that they are firmly tied to the ladder from the ground; the ground ladder should extend at least 2 rungs above gutter level. A stand-off to support the ladder on the roof is available.

Examine the ladders each time they are used to ensure that they are in working order and that they carry a valid inspection tag.

- Check that the stiles are in good condition
- Ensure the ladder’s feet are not worn, damaged or missing – or else it could slip
- Confirm that the rungs are not bent, missing or loose to keep the ladder stable
- Make sure that any locking mechanisms are engaged and do not have problems like worn or damaged fixing

Do not work up ladders for more than 30 minutes at a time. If any TVB installation task exceeds that time, stop as this indicates that the task is inappropriate.

When moving ladders to the work site, ensure that they do not come in to contact with any overhead cables. Ensure that they are securely tied to any vehicle transporting them.

Civil Works

ABbA undertakes the installation of fibre optic cabling between premises, generally working with suitably qualified subcontractors for part of the work.

When planning such work, analyse the risks involved and ensure that appropriate action is taken to minimise them. Identify the people involved in the work and consider if additional training is needed before the work commences. Ensure that the correct tools are available.

During the work, ensure that the public and animals are excluded from sites where work is in progress. If exposed trenches or pits have to be left overnight or unattended during the day make sure that they are suitably protected from the public and animals.

Before work is finished, ensure that any ground which has been disturbed has been restored to a safe condition and to the satisfaction of the landowner and/or tenant.

9. Risk Analysis

Site Surveys

Risk	Awareness
<i>Lofts</i>	Carefully assess if loft structure is capable of bearing your weight. Where floorboards are not fitted in the loft, only step on joists. Use duck boards if available but first check that ends are located over joists. Avoid touching insulation material. Check if dusty and wear face mask if necessary.
<i>Ladders</i>	You must hold a valid ladder safety training certificate. If using a ladder you must always be accompanied by another person.
<i>Trips</i>	Be aware of obstructions within premises, especially within Member’s premises where toys, etc., may be scattered around.

<i>Children</i>	Ensure that you are accompanied by the Member when his/her children are present.
<i>Long term hazard from radio transmission</i>	The consensus of medical opinion is that there is no hazard to health from radio transmission, but conversely that there is no conclusive proof that there are no long term effects. CE Directive 11/1814 recommends a maximum signal strength of 0.2V/m. Member's equipment only transmits periodically and will be placed at least 800mm above head height on the highest floor of the house. Common equipment will be provided with shielding and mounted at roof level or higher. Dedicated and calibrated test equipment is available to measure signal strength.
<i>Member's Property Specific</i>	Consider any risk relating to the specific property during the site survey; for each one, identify how to alleviate them.

Installation Work

Risk	Awareness
<i>Roof Access</i>	Only use ladders if you feel entirely confident to do so. If in doubt, find a Volunteer who is confident or engage a professional contractor.
<i>Ladders</i>	You must hold a valid ladder safety training certificate. If using a ladder you must always be accompanied by another person.
<i>Lofts</i>	Carefully assess if loft structure is capable of bearing your weight. Where floorboards are not fitted in the loft, only step on joists. Use duck boards if available but first check that ends are located over joists. Avoid touching insulation material. Check if dusty and wear face mask if necessary.
<i>Cable handling</i>	Long lengths of cable can whip when handled. Guide the cable whenever threading or pulling.
<i>Plug Crimping</i>	Crimping tools contain very sharp unguarded blades. If miss-handled, these tools could cut through a finger.
<i>Electrical equipment</i>	Be aware of the state of any electrical equipment in the area you are working. Be especially aware of power cables.
<i>Electrical Installations</i>	It is Company Policy NOT to create, extend or investigate any electrical supply for the CPE. You are required only to plug the CPE power injector into a standard 13amp socket. This can either be fixed to the property structure or on a commercially-manufactured multi-way extension lead.
<i>Children</i>	Ensure that you are accompanied by the Member when his/her children are present.
<i>Earthing</i>	Cables to external wireless equipment require earth connections at both ends. Ensure that an earth connection from the AC mains is provided to all equipment.
<i>Common Control Equipment</i>	This should be sited so that access is easy. Unlike Member's equipment, this will require access for replacement of component units.
<i>Property specific</i>	Consider what was identified during the site survey and ensure that you understand how to alleviate those risks. Consider if any additional risks have arisen due to the intended method of installation and add details to the Database.
<i>Fibre-optic cable splicing</i>	Splicing can only be undertaken by those who have been specially trained. During the termination and splicing process, you will be continually exposed to small scraps of bare fibre - the cleaved off the ends of the fibres being terminated or spliced. These scraps are very dangerous if they get into your eyes so you must always wear safety glasses! The broken ends of fibres and scraps of fibre created during termination and splicing are extremely sharp and can easily penetrate your skin. Do not touch the broken ends of fibres.
<i>Fibre-optic cable testing</i>	Testing can only be undertaken by those who have been specially trained.

	The light beam cannot be seen by the eye but can cause eye damage. Never look directly in to the fibre. If a laser tester is being used, ensure that the other end of the fibre, which could be some distance away, is properly terminated and that nobody is in danger.
Disposal of waste and unused materials	Make sure that all waste and unused materials including fibre-optic scraps are collected and disposed of appropriately. All Waste Electrical and Electronic Equipment (WEEE) including waste fibre-optics are covered by Regulations (2013)

Maintenance and Operation

The risks identified in “Site-surveys” and “Installation Work” above are all relevant. The specific risks identified for the property

Risk	Awareness
<i>Uninterrupted power supplies (UPS)</i>	Even when switched off, there is a danger of shock. All units must be labelled to warn of this.
<i>Deterioration of equipment</i>	Visually check equipment and power leads before effecting maintenance to ensure that they are still safe.
<i>Radio Equipment</i>	Do not spend more time than necessary in the proximity of radio equipment.
<i>Fibre-optic cabling</i>	Testing can only be undertaken by those who have been specially trained. The light beam cannot be seen by the eye but can cause eye damage. Never look directly in to the fibre. If a laser tester is being used, ensure that the other end of the fibre, which could be some distance away, is properly terminated and that nobody is in danger.

Computer and Desk Based Work

Risk	Awareness
<i>Workspace</i>	Keep area around workstations tidy and free from clutter. Empty bins regularly. Keep cables to a minimum and ensure that they are not trailing into walkways without adequate warning devices. Cover with cable tidy.
<i>PCs and Workstations</i>	Assess workstation at home and ensure seating is comfortable and at correct height for screen and keyboard. Ensure that lighting is adequate. When using a PC for more than an hour, take a break. Ensure that an eye test is carried out at least every 2 years. Avoid any bending and twisting.
<i>Electrical Loads</i>	Ensure that the electrical load on any socket outlet does not exceed its capacity by the use of extension sockets etc.
<i>Circulating</i>	Keep exits and passageways clear.
<i>Fire Exit</i>	Ensure you know the location of fire exits.

Storage

Risk	Awareness
<i>Storage Racks</i>	All racking must be secure. Check that racking is capable of holding anything you place on it.
<i>Manual Handling</i> Assess equipment to be handled, and where it is to be	Assess equipment to be handled, and where it is to be transported to. Carry for as minimum a distance as possible. Split load if possible. Avoid lifting anything that is too heavy for you. Place heavy items on middle shelves. When bending, bend the knees, not the back.
<i>Storing</i>	Ensure that equipment/boxes are stored so that they are not in danger of falling out.