

Abthorpe Broadband Association Ltd.

Bringing Broadband to the community since 2003.

**Tove Valley Superfast Broadband
Health & Safety Policy and Risk Analysis
April 2016**

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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. ABbA also accepts responsibility for the health and safety of other people in proximity while undertaking activities.

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

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 and maintenance of Accident Book	John Riches

The Responsible Officer (referred to as "**RO**" in the text) 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.

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.

All Team members must be aware of and abide by this Policy.

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, with the exception of the installation of fibre links between villages. TVB is responsible for the maintenance of all fibre links.

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 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.

External equipment consists only of field replaceable items. Maintenance will consist 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.

7. Accidents

If any accident occurs which involves personal injury, no matter how slight, details must be reported to John Riches for recording 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 warning that they are only to be opened by Team members with appropriate training.

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.

Fibre-optic Cables

Fibre-optic cables carry laser beams which will 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. Equipment with fibre-optic connections will carry suitable warning labels.

Ladder Safety

Installation of the TVB wireless equipment often involves the use of ladders. When deciding on a location, give preference to a location which does not require a ladder. Plan the work in advance. Ladders must only be used by Members who feel confident to do so. 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. Tie long ladders off to a convenient anchor point. This may mean screwing an eye bolt into the wall and tying the ladder to it. If roof ladders are used, ensure that they are firmly tied to the ladder from the ground.

Examine the ladders each time they are used to ensure that they are in working order, especially where ladders are supplied by a Member.

- 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.

In some cases, the Member may ask to use ladders to access the roof for maintenance and may offer to install the equipment. Make clear to the Member that he would be undertaking that work at his own risk.

TVB have a 3-stage 4metre ladder, stand-off and foot pads. There are also roof-ladder adapters.

9. Risk Analysis

Site Surveys

Risk	Awareness
<i>Lofts</i>	Carefully asses 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 be familiar with ladder safety. 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 where the walls of the property offer protection and not level with any place where anyone is likely to be for any length of time. 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>Property Specific</i>	Consider any risk relating to the specific property during the site survey; for each one, identify how to alleviate them. Record risk and alleviation on the TVB database under Member's Details.

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 be familiar with ladder safety. 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 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>	Consult the TVB Database under Member's Details to find out 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. 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.
<i>Disposal of waste and unused materials</i>	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>	<p>Assess workstation at home and ensure seating is comfortable and at correct height for screen and keyboard.</p> <p>Ensure that lighting is adequate.</p> <p>When using a PC for more than an hour, take a break.</p> <p>Ensure that an eye test is carried out at least every 2 years.</p> <p>Avoid any bending and twisting.</p>
<i>Electrical Loads</i>	<p>Ensure that the electrical load on any socket outlet does not exceed its capacity by the use of extension sockets etc.</p>
<i>Circulating</i>	<p>Keep exits and passageways clear.</p>
<i>Fire Exit</i>	<p>Ensure you know the location of fire exits.</p>

Storage

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