



TPU 1874 Revised 7th Feb 2023

Revision 14

User Guide

BT Headquarters

Networks Code of Practice for Safe Working on Radio Towers and Masts

Version History

Version No.	Date	Author	Comments			
Issue 14 7th February 2023 Stewart Mardle		Stewart Mardle	BT High Tower Permit amended. Contacts updated. Section 13.3 wording alteration Section 13.4 insurance requirement			
Issue 13	22 nd September 2022	Stewart Mardle	Standards updates, drone info, amended permit & minor updates			
Issue 12	1 st April 2021	Stewart Mardle	BT High Tower Permit amended. Other minor amendments.			
Issue 11	11-Sep-2020	Stewart Mardle	Clarification on approved RF monitors (section 10.7) & BS Standard updates			
Issue 10	29-Feb-2020	Stewart Mardle	Amendment to section 12.1 – text on/off process			

Page 2 Review date: Feb 2025

1. Introduction	4
2. Scope	4
3. Acknowledgement	4
4. References	5
5. Legislation	6
6. Definitions	7
7. Personnel Involved	8
8. Training and experience	9
9. Protective Clothing	10
10. Safety Equipment	11
11. Supervision and authorisation. 11.1 Contractors Obligations 11.2 Method Statement 11.3 Permit to climb 11.4 Permit to work 11.5 Radio towers not under BT control 11.6 On site supervision 11.7 Ferro Concrete towers	13
12. Work Procedures	15
13. Contractor Scope of works. 13.1 Site share compound 13.2 Ground based works 13.3 Tower works 13.4 Drones	19
14. Emergency Procedures	20
15. Key Contacts	21
16. Permit to climb	22

1. Introduction

Work above ground level, on radio towers and masts, automatically creates a safety hazard to the personnel involved and to others at ground level whether or not directly involved in the work. This cannot be totally eliminated. However, by careful planning and supervision of such work, careful selection and training of the personnel involved and by the use of suitable equipment and emergency procedures, such risk may be minimised.

This Code of Practice is intended to cover the safety precautions necessary when undertaking work on radio towers and is based on current accepted practice.

This Code of Practice has been written so that supervision of the work at site can be exercised by a representative of BT and the contractor's (or other organisation's) senior representative on site.

2. Scope

This BT Code of Practice covers the procedures to be followed by contractors and other organisations' personnel in the preparation and performance of work on radio towers, the selection and training of personnel to perform such work and the procedures which shall be followed in the event of an emergency.

This Code of Practice relates to rigging companies and contractors assessed by BT as competent for this type of work. A separate assessment will be made for each project, taking into account the skills and experience needed for that project. It is also intended to cover personnel from other organisations operating radio services and their contractors, who may need to climb on BT towers. Untrained personnel are not covered by this Code of Practice and will work only under direct BT supervision and control.

The contents of this code of practice do not relieve the contractor of any additional responsibilities as required by the BT representative, Statutes and Regulations.

3. Acknowledgement

All requests for Permits to Climb BT structures from external contractors must be acknowledged by an e mail to the RCLO or the BT control team issuing the permit. This confirms the rigging organisation's acceptance of the conditions imposed in this document.

TPU 1874A Rev 14 - Revised: February 2023 Paae 4 Review date: Feb 2025 *Owner: Stewart Mardle*

4. References

This Code of Practice refers to but is not limited to the documents listed below. Unless otherwise specified the latest editions of these documents, including all addenda and revisions, shall apply.

4.1. British Standards

BS EN 358:2018	Personal protective equipment for work positioning and prevention of falls from a height. Belts for work positioning and restraint and work positioning lanyards
BS EN 354:2010	Personal fall protection equipment - Lanyards
BS EN 374 & BS EN ISO 21420:2020	Protective gloves
BS EN ISO 20345:2022	Safety footwear: specification for safety footwear other than all rubber and all plastics moulded types.
BS EN 166:2002	Personal eye protection : specifications
BS EN 12492:2012	Specification for climbers' helmets.
BS EN 360:2002	Personal protective equipment against falls from height, retractable type fall arrestors.
BS EN 361:2002	PPE against falls from height – full body harness
BS EN 397:2012+A1:2012	Specification for Industrial safety helmets
BS EN 352 - 1:2020	Industrial hearing protectors
BS EN 795:2012	Personal fall protection equipment – anchor devices
BS EN 892:2012+A2:2021	Mountaineering Equipment. Dynamic Mountaineering ropes
BS 7985:2013	Rope Access methods
BS 8437:2022	Code of practice for selection, use and maintenance of personal fall protection equipment for use in the workplace
BS 8460:2017	Code of practice for the safe use of MEWPS

Page 5 Review date: Feb 2025 TPU 1874A Rev 14 - Revised: February 2023 Owner : Stewart Mardle

5. Legislation

It is essential that personnel supervising work on radio towers are familiar with relevant statutory requirements and that they consult with the BT RCLO / Senior Tower Policy Manager regarding any specific project.

Work on operational radio towers will be subject to various legislation including, but not limited to, the regulations listed in section 5.1 below. All work on towers and masts shall be deemed to be work of engineering construction.

5.1. Statutes and Regulations

Health and Safety at Work etc Act 1974

Construction (Health, Safety and Welfare) Regulations 1996

Construction (Design and Management) Regulations 2015

Health and Safety (First Aid) Regulations 1981

Reporting of Injuries Diseases and Dangerous Occurrences Regulations 2013

Control of Substances Hazardous to Health Regulations 2002

Noise at Work Regulations 2005

Management of Health and Safety at Work Regulations 1999

Work at Height Regulations 2005

Lifting Operations and Lifting Equipment Regulations 1998

The Control of Electromagnetic Fields at Work Regulations 2016

Control of Vibrations at Work Regulations 2005

The Workplace (Health, Safety and Welfare) Regulations 1992

Page 6 Review date: Feb 2025 TPU 1874A Rev 14 - Revised: February 2023 Owner : Stewart Mardle

6. Definitions

For the purposes of this BT Code of Practice the following definitions shall apply:

BT:

British Telecommunications plc.

BT Representative

The BT representative providing day-to-day supervision / monitoring of the site works.

Competent Person

A competent person is someone who has sufficient training and experience or knowledge and other qualities that allow them to undertake the activities they are required to carry out. The level of competence required will depend on the complexity of the task.

Contractors Supervisor (Team Leader)

The person nominated by the contractor in the case of contracted work, or by the employer of persons belonging to any other organisation, to be completely responsible for the safety of personnel and the correct use of equipment.

The person, firm or company with whom BT enters into a contract to which this Code of Practice applies, including the contractor's personal representatives, successors and permitted assigns.

Control

BT's internal rigging control team

Engineer

The engineer appointed from time to time by BT and notified in writing to the contractor to act as engineer for the purposes of the contract.

PHE - Public Health England

Formerly NRPB (National Radiological Protection Board), now part of Public Health England (PHE), they conduct research of radiological protection and provide advice and information on the subject.

Other Organisations

Organisations operating their own radio services who may have some of their aerials on BT towers, who are allowed access to these towers for their personnel to install and service their equipment.

Rigging Control and Liaison Officers (RCLOs)

The RCLO's are BT specialist safety officers and are appointed to advise on safety requirements and supervise safe conduct of work, they are responsible for BT's safety policy and auditing compliance with it, within the framework of current health and safety legislation. for work on and around radio towers and masts. They report to the Senior Towers and Rigging Policy Manager.

A communications tower, mast or similar aerial support structure:

Working at Heights

A place is at height if a person could be injured falling from it, even if it is at or below ground level.

Paae 7 Review date: Feb 2025 *Owner: Stewart Mardle*

7. Personnel Involved

7.1. Selection of Personnel

Only competent Climbers, Riggers or other persons experienced and trained to climb and work on towers shall be employed on the work. All personnel attending a BT site must have sufficient understanding of both verbal and written English on the grounds of Health and Safety. They must be able to understand this document, terms of any permits and communicate effectively with the BT Representative on site. Anyone under the age of 18 must be clearly identified on any permit request so that the correct BT Representative can be sent to site in order to assess the levels of supervision and understanding of the tasks being undertaken.

7.2. Fitness for Work

All climbers on BT towers must undergo periodic medical examinations every three years (annually for those over fifty years of age) to ensure that they do not have any medical conditions, physically or mentally, which may interfere with their work or put themselves or others at risk. The MATS group web site details minimum training standards agreed by the major tower operators ((http://www.matsgroup.info/). Climbers may be asked to provide evidence of a current medical examination.

Any person involved in the climbing of towers who is aware of any personal medical complaint, or any other reason which might in any way affect his ability to climb or work, and which might endanger himself or any other person, must tell the contractors supervisor (team leader). The team leader must immediately inform the BT Representative or RCLO. They must not climb until agreement has been reached with the BT Representative or RCLO. As required by the Control of Electromagnetic Field at Work regs 2016, all climbers must ensure that they have met the requirements of the regulations regarding medical implants, passive and active medical devices etc.

7.3. Welfare & Health & Safety

All climbers on BT towers are responsible for the safety of themselves and others at all times whilst on BT Premises as defined under the Health and Safety At Work Act 1974 regulations 7 & 8. Given the nature of radio work and remote locations, climbers must ensure they have the appropriate clothing and footwear for the weather and environment. They may also need to consider other items such as sunscreen and fresh bottled water. They also need to ensure the appropriate duty of care system is in place with their own employers.

Page 8 TPU 1874A Rev 14 - Revised: February 2023
Review date: Feb 2025 Owner: Stewart Mardle

8. Training and Experience

No person shall undertake work which involves climbing radio towers unless they have previously received adequate and suitable training and experience of that work. Documentary evidence shall be provided of the training and experience of each member of the team. Suitable evidence would be a statement of training certificates and full details of work undertaken to date, provided by the contractor to the engineer in charge of the project. The standard Climbers Record of Competence booklet may be used on site to prove identity, and to confirm previously submitted personal training and experience records. Training, including both formal and practical instruction, shall include as a minimum the following:

- Procedures to be followed prior to the commencement of climbing.
- Assessment of suitable conditions for climbing.
- The selection, use, examination and maintenance of safety equipment.
- The selection, use, examination and maintenance of protective clothing.
- Climbing techniques, procedures and precautions to be observed on operational towers.
- Procedures to be followed in the event of an emergency.
- Ground level signing and guarding.
- Assessing and avoiding RF Hazards.

Training must meet the MATS minimum standards and all climbers must have undertaken MATS approved training as monitored by EUSR. For further information, see the MATS website - http://matsgroup.info/ and the EUSR site - https://www.eusr.co.uk/schemesprogrammes/our-industries/telecommunications/basic-tower-climbing-and-rescure/

Paae 9 Review date: Feb 2025 *Owner: Stewart Mardle*

9. Protective Clothing

Personnel involved in climbing a tower shall be suitably clothed for the weather conditions prevailing at the time. Compound sole boots or shoes to BS EN ISO 20345:2011 shall be worn with a defined heel (see 9.1).

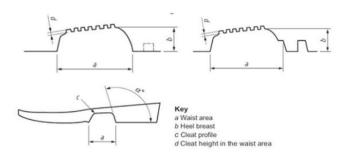
Clothing, including gloves, shall not unduly impede movement. Bright coloured clothing or reflective patches, for identification purposes, are recommended.

Climber's helmets complying with BS EN 12492:2012 or safety helmets complying with BS EN 397:2012+A1:2012 shall be worn at all times when working either on or in the near vicinity of an operational tower. Chin strap must be fastened at all times.

Shorts are not permitted to be worn on masts and towers. Long trousers must be worn whilst climbing at all times.

9.1. Safety Boots – Defined Heel

Safety boots must have a defined heel for climbing structures.



The diagram above explains the minimum requirements of the components of the sole

- The cleat design (excluding the waist area) must be such that there are no continuous linear transverse valleys across the sole
- The cleat height mustn't be less than 3mm
- The outsole must have transverse cleat with a height of at least 1.5mm in the waist area
- The outsole must have an inclined-breast heel. The distance "a" in the diagram above must be at least 35mm. The angle must be between 90 and 120 degrees and the dimension "b" (depth of heel break) must be at least 10mm.

Page 10 TPU 1874A Rev 14 - Revised: February 2023 Review date: Feb 2025 Owner: Stewart Mardle

10. Safety Equipment

10.1. Types of Equipment

All persons climbing BT towers are to wear and use a Safety Harness complying with the requirements of BS EN 358:2018 and BS EN 361:2002. Adequate precautions shall be taken against an accident, and in particular a fall, when personnel are working, changing positions at heights on towers, or when ascending or descending structures.

All personnel are to be permanently attached to the structure **at all times** by suitable purpose designed fall arrest equipment once they move away from a recognised place of safe access from where a fall from height is possible. A working platform conforming to the requirements of the Work At Height Regulations 2005 would constitute a place of safe access. It is the responsibility of the contractor's supervisor (team leader) to confirm places of safe access on the structure with the BT Representative or RCLO.

The wearing of a fall arrest harness and use of climbing hooks is mandatory (where the ladder is used for access above 2 meters in height), including ladders equipped with safety hoops, unless the ladder has been equipped with a fixed fall arrest system and the climber has access to the correct kit needed to use the system. A fixed fall arrest system should be used where installed and in service. Permission will be required from the structure owner to use climbing hooks.

A calibrated, working RF Monitor must be worn by all personnel accessing any BT Tower and or for roof access works. The device must be worn between chest and waist height on the user. Personnel must also be able to demonstrate the required understanding and its correct usage when asked.

Contractors must ensure that they have their own rescue kit on site and are familiar and competent in its use and deployment. Equipment in the kit must be properly inspected and suitably marked. A rescue plan must be discussed and agreed with the BT Representative before climbing commences. Any plan must also take into consideration the need to rescue the BT Representative if they are an authorised climber so the contractor needs to ensure enough suitable equipment is available to carry out a rescue. In some cases if the BT Representative is not fully comfortable with personnel's understanding of rescues after discussions, they can request that the contractor demonstrates the equipment's usage to ensure competence.

10.2. Storage of Safety Equipment

Safety equipment shall be stored in line with manufacturers instruction, preferably in a cool dry place and not subjected to direct sunlight. Precautions shall be taken to avoid contact with sharp objects, corrosives and other possible causes of damage.

10.3. Examination and Maintenance

Before every climb, all safety equipment which may be used shall be examined by the intended user for wear and any damage or malfunction. Any defective items shall be replaced with suitable ones before climbing.

A complete record, including certification, thorough examinations and details of any repairs or servicing carried out, shall be maintained for each item of safety equipment. Where possible this should be kept on site but should in all cases be freely available for inspection.

10.4. Annual Inspection

At least once every 12 months all safety equipment shall be thoroughly examined by a competent person, who shall report in writing the result of the examination to the person

Page 11 TPU 1874A Rev 14 - Revised: February 2023
Review date: Feb 2025 Owner: Stewart Mardle

responsible for the safety equipment. Equipment used for lifting people must be thoroughly examined at least every 6 months.

10.5. Action following a fall or damage to safety equipment

Any item of safety equipment which has been subjected to a fall or has been damaged must be immediately withdrawn from use, marked accordingly, and returned for examination by a competent person. Before being put back into use, providing this meets the manufacturer's instructions, the item shall be recertified by the competent person as being suitable for further use.

10.6. Tethered tools

All tools and equipment MUST be properly tethered using appropriately rated and approved tethering equipment. Pieces of string / rope etc will not be acceptable. All items must be tethered including tools, RF badges, phones, radios, alignment tools etc. When carrying hand tools aloft, they must be tethered to the user or ideally in a properly rated tool bag with a secure closure.

10.7. RF Monitors

The following RF monitors only are approved for use on BT Masts and Radio Tower sites



Narda XT



Radman 2XT



Nardalert S3



WaveMon RF-60

Page 12 Review date: Feb 2025 TPU 1874A Rev 14 - Revised: February 2023 Owner : Stewart Mardle

11. Supervision and Authorisation

11.1. Contractors Obligations

The Contractor shall carry out the works specified on the associated job sheet. All works must be carried out in a safe and professional manner. Method statement documentation shall be supplied to BT for agreement prior to commencing any site works.

The Contractor shall provide all necessary labour, plant and material for the proper execution of the Works. All materials plant and equipment used shall be to appropriate British Standards unless otherwise agreed by BT.

11.2. Method Statement

Prior to the commencement of any work, the contractor must produce and agree a written work method statement and dynamic risk assessment with BT. Any deviation from these documented methods shall be agreed in advance with the BT Representative or RCLO.

All persons shall comply with the all applicable regulations and follow BT safety rules and safety instructions effective at any site where they may work and steps must be taken to ensure compliance and that there is no deviation from the written work method statement.

The contractor's supervisor must be completely familiar with the written work method statement and ensure that and the risk assessment is briefed to all parties.

11.3. Permit to Climb

Ascent of BT aerial support structures is controlled by the BT Rigging Control Liaison Officer (RCLO) or rigging control under fault conditions. RCLO or rigging control authority must be given before any BT structure is climbed. The RCLO name and contact point will be shown on a notice attached to the base of the structure. A copy of the fully completed and authorised Permit to Climb must be in the possession of the persons wanting to climb and available to view (Electronic or paper version). The RCLO central number is 08000113775

11.4. Permit to Work

Work on a radio tower on a BT controlled site may also be subject to a written `Permit to Work'. This will be issued by the BT department responsible for the site and / or 3rd party depending on the requirements for the permit, to the site team leader. They must sign to accept any restrictions or conditions which the permit may impose and must keep it in their possession until work is completed. It can never be transferred to another person or altered in any way. A Permit to work is required whenever there is a need to carry out work in an area where action by another person is required to make that area safe.

The permit shall state as a minimum, the work to be done, the location of the work, any general precautions necessary, any restrictions, limitations or conditions, including any special hazards, and details of any time restrictions including the intervals at which the permit must be re-signed or renewed.

On completion of works, the permit to work needs to be closed down prior to leaving site.

11.5. Radio Towers not under BT Control

Before personnel working on behalf of BT climb or work on a radio tower which is owned by or is under the control of another organisation, written permission to climb and work shall be in the possession of BT or arrangements shall be made with the owner of the tower for their representative to be present on site while the work is in progress.

Page 13 TPU 1874A Rev 14 - Revised: February 2023
Review date: Feb 2025 Owner: Stewart Mardle

The written working instructions given to the contractor's supervisor of the personnel carrying out the work shall either include reference to the written permission in possession of BT or require the owner's representative to be on site.

11.6. On-Site monitoring / Supervision

Work will be monitored by an appointed BT Representative. Where higher risk activities are taking place then a BT Representative experienced in this type of work will be required to be on site.

The contractor's supervisor shall ensure that all necessary safety precautions prior to and during the execution of the work, are taken. The contractor's supervisor shall not leave the site during the work without nominating a competent deputy.

The decision to climb is to be taken only by the contractor's supervisor and this will be dependent on the prevailing circumstances. No person is permitted to climb or work on a tower without the prior approval of the person supervising the work on site.

Nothing in this Code of Practice is intended to preclude the contractor's supervisor from being one of the persons involved in the work on the tower or being responsible for supervision.

The BT Representative, RCLO or the BT Senior Tower Policy Manager will have the authority to stop the work if, in their opinion, any of the above conditions are not being adequately complied with or if the safety of BT staff, other persons or BT's plant and equipment is exposed to risk.

There will be no extra payments made by BT for measures which the contractor is required to take to comply with the terms of this Code of Practice.

Sub-contracting of all or part of the work to another organisation can only be to BT accredited organisations, and then only with the express written approval of BT.

An organisation's competence for each project will be assessed according to the type of work involved. Accreditation for competence will be given separately for individual projects.

11.7. Ferro Concrete Towers

Climbing activities within and/or on a BT Ferro Concrete Tower – It is a now a mandatory requirement for all persons climbing a BT owned Ferro Concrete tower to have a secondary means of escape for use if the main internal ladders of the tower cannot be accessed e.g. In the event of a fire inside of the tower. In such an event where the internal ladders cannot be accessed to safely evacuate the tower then your emergency plan/ risk assessment must be followed. If it is deemed necessary for you to evacuate the tower immediately then the BT issued personal evacuation kit must be deployed as per instruction by the onsite BT Representative.

If the work being undertaken is via rope access and the working and back up ropes safely reach ground level then this can be deemed a safe evacuation method.

The onsite BT Representative will demonstrate the set up and use of the kit and ensure all climbers have access to a kit before ascent of the structure. **Please be aware that this equipment is for personal evacuation only and does not in any way replace or perform the function of a Rescue kit

Page 14 TPU 1874A Rev 14 - Revised: February 2023 Review date: Feb 2025 Owner: Stewart Mardle

^{**} A maximum amount of 4 kits may be available to contractors at each site.

12. Work Procedures

12.1. Notification of arrival at site

The controlling department or authority responsible for the site shall be informed of arrival at site of the working party. In the case of a BT controlled site authorisation to climb must be obtained before any work is commenced.

All personnel visiting a site (BT and 3rd Party) must use the Text On / Text Off system to record all attendance onsite – Texts are required on entering and leaving the site perimeter.

Text to 81192:

On arrival at the site gate, send an Open text, the system will respond with a receipt confirmation and a PTW ref

 OPEN TEXT FORMAT: ntptw open, <Radio>,<1141code>,<forename surname>,<Company>,<Est completion time>,<site visit purpose>

On departing site, at the gate, send a Close text, the system will confirm the PTW closure

CLOSE TEXT FORMAT: ntptw close, <PTW number>

For example



Open Text Examples:

- ntptw open, Radio, YLCH, Joe Bloggs, Vodafone, 1600, inspection
- ntptw open, Radio, YLCH, Joe Bloggs, Cellnex, 1800, fault
- ntptw open, Radio, YLCH, Joe Bloggs, EE, 1230, install **Structure:**

Open, or close,

Radio, 1141, Name.

Company, - BT, BTFS or 3rd Party Name

Xxxx, Expected completion time

Site Visit purpose -

- 'fault' (service)
- 'Inspection' (Safety inspection of equipment as per licence)
- 'install' (any ground installation activity in own cabin / sharer building)
- 'recovery' (and cease / recovery activity in own cabin / sharer building)

Close Text Example:

ntptw close, PTW000042

Approximately 15 minutes before the permit is due to expire, the system will send a text message, reminding you of the pending expiry

The message you will receive will be in the following format:

The permit *PTW_NUMBER* for *1141_CODE* is approaching it's estimated finish time of *CURRENT_FINISH_TIME*, please either extend or close this permit.

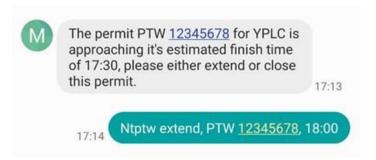
Page 15 TPU 1874A Rev 14 - Revised: February 2023 Review date: Feb 2025 Owner: Stewart Mardle

To extend a permit, you will need to text 81192 with:

ntptw extend, PTW_NUMBER, NEW_FINISH_TIME

e.g.

ntptw extend, PTW000456, 1700



12.2. **Preparation for Work**

Before any climbing is done, the personnel who are to carry out the work shall be made aware of the conditions of the Permit to climb, permit to work if applicable and of the procedures to be followed in the event of an emergency.

All safety equipment, protective clothing, or anything which may be used during the climb shall be examined for damage or malfunction immediately prior to the climb and any defective items shall be replaced with suitable items before climbing starts.

12.3. Ground Level precautions for site safety

Suitable barriers and warning notices shall be erected in appropriate positions to define the work area and prevent people at ground level being put at risk due to work being performed on towers. Consideration must be given to clearly identify drop zones, suitably marking them with adequate barriers and warning signs as appropriate. Additional personnel may be required to prevent unauthorised access to the drop zone area.

12.4. Radiation and Electrical Hazards

Before any climbing on a radio tower is undertaken, all practicable precautions shall be taken to eliminate danger due to live electrical cables, or apparatus which is liable to be a source of danger. All potential hazards in the work area will be stated on the Permit to climb and permit to work where applicable. All persons must assume that all electrical apparatus is live unless they have been specifically notified in writing that it has been switched off.

No climbing, work, or inspections on towers shall take place in areas where BT has calculated the radiation hazard to be greater than the investigation levels recommended by the Public Health England (PHE).

All people accessing BT Structures are required to have a calibrated working RF Monitor.

Readings with a radiation hazard meter, at the correct frequency, will be taken by BT to confirm the calculations, when the calculated figure approaches the investigation level. In areas where work is to be carried out and the RF levels exceed the recommended investigation level, work shall only be undertaken with the power to the equipment causing the radiation switched off or reduced to a level that complies with PHE guidelines, for the duration of the work activities.

The BT Permit to work will define any areas where the radiation hazard exceeds PHE recommended investigation levels, and these areas will be physically isolated by a suitable barrier to prevent personnel approaching the source of the radiation. Appropriate notices will be displayed adjacent to the barriers to warn personnel of the radiation risk.

Paae 16 Review date: Feb 2025

12.5. Waste

All waste materials shall be disposed of by the Contractor in such a way that ensures compliance with all relevant environmental and waste legislation. When required, waste disposal notes should be retained and made available to BT for inspection on request. BT will not accept responsibility for the disposal of any waste materials. BT waste skips / bins must not be used.

12.6. Climbing and Working Conditions

Once the BT Representative has given approval to climb, the contractor's supervisor is responsible for the final decision as to whether to undertake a climb, the opinion of the personnel who will be involved in work on the tower should be taken into consideration. In normal circumstances climbing should not be commenced if:

- The steelwork has ice or snow on it.
- There are high winds, or heavy rain.
- Thunder is heard.
- A storm is forecast.
- Visibility is such that the working location on the tower cannot be seen from the ground.

Personnel involved in work on towers shall remain alert for any adverse changes in weather conditions, for example, increase in wind velocity, excessive gusting or distant thunder. Should any such changes be detected and be considered detrimental to continued working then the personnel on the tower should descend immediately.

It should be noted that the local Meteorological Office is often able to give short term weather forecasts.

12.7. Work on Towers

Unless on a designated safe working platform, climbers must be attached to the structure with suitable fall arrest equipment at all times.

In situations where the nature and location of the work only requires one person to climb the structure, there must be at least one other person on site in contact with and watching the person on the tower. The second person must also be trained and competent to work at height on towers and masts and must be familiar with rescue procedures. Unless it is essential, one person should not work in a position directly under another and be exposed to the danger of being hit by falling tools or other items. The BT Representative will not act as this second person for a contractor or non BT climber.

Tools and small items of equipment agreed with the BT Representative shall be hoisted up and down the tower using a suitable rope with controlled lifting and lowering in place. In no circumstances shall any item, for example, tools, bolts and so on, be thrown from a tower. Refer to section 10.6 for tool tethering requirements.

On completion of work on any tower, all tools, test equipment, materials and so on, shall be removed from the structure. Every effort shall be made to carry out work or inspection of a tower from the confines of a platform or permanent ladder.

Care shall be taken to anchor safety harnesses fall arrest equipment to a sturdy horizontal member of the tower when in the working position. To avoid infringing the maximum permitted safe drop, anchorages shall not be made below the level of attachment to the harness unless absolutely necessary. While climbing you may have to risk a fall factor 2 but you should mitigate the fall as soon as possible by subsequent anchorages as high as possible.

Page 17 TPU 1874A Rev 14 - Revised: February 2023 Review date: Feb 2025 Owner: Stewart Mardle

Where it is impossible to carry out the work from the confines of platforms or ladders, self-locking safety anchorages to BS EN 360 may be used before moving out onto the tower structure.

On the completion of work, the Permit to work shall be signed by the holder and returned to the issuing authority. All barriers and warning notices erected before the work commenced shall be removed.

The controlling department or authority responsible for the site shall be informed of the completion of work and the departure of the working party from site. Contractors must text off the site upon leaving.

Page 18 TPU 1874A Rev 14 - Revised: February 2023 Review date: Feb 2025 Owner: Stewart Mardle

13. Contractor Scope Of Works

Contractors / 3rd parties are allowed to carry out certain activities as outlined below. Any works carried out that are not authorised will be investigated by BT and appropriate action taken against the contractors / company concerned.

13.1 Site Share Compound

Where a radio site has a separate site share compound, contractors / 3rd parties with appropriate keys will not need to be monitored by BT. All personnel must still text on and off the site using the process as detailed in section 12.1

Within the site share compound, contractors will be able to undertake repair activities without prior approval from BT. Any installation or recovery works must be notified to and approved by BT before works commence.

13.2 Ground based works

Any ground based works within the BT tower compound area will need to be monitored by a BT Representative.

13.3 Tower Works

All works on a BT tower and within the tower compound, will need to be monitored by a BT Representative, even if the 3rd party has obtained keys. The BT representative will provide access to the site, unlock the anti-climb on the tower and check relevant equipment / documentation as required.

Any new equipment MUST be installed by BT Riggers and is subject to BT's space allocation and design approval processes, along with any new steelwork.

Contractors / 3rd parties are allowed to install and recover a single item of equipment on a like for like basis only for fault repair. All equipment must be able to be lifted up the tower using controlled lifting and lowering and without the use of winches. Under no circumstances are upgrades to sites or new installations allowed. Should a fault require one item of equipment to be replaced with a different variant then this must go back to BT as an application for site alteration and the installation will need to be completed by the BT Riggers.

Again, under fault conditions only, contractors are allowed to utilise winches to lift a piece of equipment up a tower, but this must be undertaken with a BT Representative with the appropriate skills in attendance only and is subject to RAMS approval and agreement from the BT Representative. Winches are allowed providing they have an integrated braking system to prevent unintentional release.

13.4 Drones

BT will allow drones to be used on its radio sites, providing the following conditions are met.

- All pilots must hold an approved pilot's licence covering the class of drone they are flying.
- A full set of RAMS (Risk Assessment and Method Statement) must be produced by the customer. This needs to be sent to the RCLO for the site and National Tower & Rigging Policy Manager at least 1 week before the supervision is to take place to allow time for approval.
- Appropriate insurance must be in place and evidence provided.

Page 19 TPU 1874A Rev 14 - Revised: February 2023
Review date: Feb 2025 Owner: Stewart Mardle

14. Emergency Procedures

Before any work is undertaken, the action to be followed if an emergency should occur shall be agreed by the members of the working party. Note that any emergency plan must not include use of the emergency services.

The person responsible for putting the emergency procedure into operation should be at liberty to decide, based on the conditions prevailing at the time, the order in which the emergency procedure should be accomplished.

The contractor must ensure that adequate arrangements are made for staff in the event of an accident or emergency. If working aloft, the contractor must be able to demonstrate that their staff have been trained on Emergency Tower rescue and demonstrate they attend regular refresher events (Compliant with BT Contractor policy).

They must ensure that all his staff are aware of these arrangements. They must comply with the First Aid Regulations, and ensure that a first aid kit is available on site and that an appointed person with a basic knowledge of first aid is present on the site at all times when his employees are at work. Where climbing is required, all climbers must have an in date Emergency 1st Aid At Work certificate or higher.

The attention of contractors is drawn to the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations, regarding accidents and the sending of written notice in the prescribed form to the enforcing authority. A copy of this notice must be forwarded to the BT Senior Tower Policy Manager.

All accidents, incidents and near misses, however trivial, must be recorded and reported to the BT Representative in writing immediately, in either paper or electronic formats.

Page 20 TPU 1874A Review date: Feb 2025

15. Key Contacts

BT Radio Safety Managers

Stewart Mardle, Dipnebosh, MSC, AIEMA, CMIOSH

National Towers & Rigging Policy Manager

Networks

Teams: +44 (0)331 6262004 Mobile: +44 (0)780 1624234 E Mail: stewart.mardle@bt.com

Jonathan Marshall

RCLO, SW & S Wales

Networks

Mobile: +44 (0) 7435 660491

E Mail: jonathan.3.marshall@bt.com



BT%20Hightower%2 0Access%20Permit%2

Page 21 TPU 1874A Rev 14 - Revised: February 2023 Review date: Feb 2025 Owner: Stewart Mardle

16. Permit To Climb

British Telecommunications PLC Form A1485 - V21 31/01/2023

BT HIGHTOWER ACCESS PERMIT

This document is to be used for applying for Access to BT Masts, Towers & Structures. When completed, this form must be taken to site as evidence of written authorisation.



Complete all fields indicated below and ensure you sign the Declaration.

Type of access required: Choose an item. Date of application:Enter a date.

Official use on	y
Permit Auth?	
BT Ref No:	

Name of Ap	Name of Applicant and Company:		Company Address / BT OUC:			
Name and C Telephone N	. ,		Company Address/BT OUC			
START	DATE: Click to enter a date.			DATE: Click to enter a date.		
	Time:	Click to enter text.	FINISH	Time:	Click to enter text.	
BT Tower/N or site at:	BT Tower/Mast Click to enter text. or site at:			Working Height (if climbing). Click to enter text.		Click to enter text.
Names of at	tending	personnel:				
Team lead	Team L	ead/lead Engineer	Contact number Contact		Contact No).
Names of ad	lditional	personnel (and contact no. if available)		·		
Description	of work:					
Click to ente	er text.					
*Note: Clear an	nd concise o	lescription required, include name of MNO/license	e if applicable.	Insufficier	nt information	will result in the Permit being declined.

Declaration:

I confirm that - All personnel and the tasks they carry out, will comply with the <u>latest version of BT's Code of Practice</u>

TPU 1874. (Ctrl and click to view)

A Risk assessment will be carried out prior to accessing the site and IF CLIMBING a Rescue Plan will be in place BEFORE ascending the structure, with suitable rescue kit on site.

Evidence is available for all mandatory training required to carry out the tasks, should it be required.

I also confirm that all climbers have a current MATS Climber and Rescue certification, an in-date Medical, First Aid certificate, up to date RF awareness training and all PPE and equipment is within inspection test dates.

On receipt of an Authorised permit I will notify the attending personnel of any comments/conditions outlined by the RCLO

Signature: Click to enter signature.

Print Name: Click to enter text.

Date: Click to enter date.

For BT use only - To be completed by RCLO/BT Radio Hightowers (out of hours)

Comments / Remarks / Hazards / Precautions:

All named individuals on this permit MUST provide Photographic ID upon arrival at site.

The BT Supervisor will

Ensure you are familiar with the site and any issues highlighted on Peacemaker or by the BT Supervisor before ascending any structure.

Any relevant Safety issues or conditions for this permit; (click here to enter text)

Name: Choose RCLO		BT Ref. No:	[enter permit no.]
RCLO Signature: Controller issuing permit –	Click to enter text.	Date & Time	07/02/2023 09:16

TMN/RSM/A135 - Permit to climb V21 –Issued 31/01/2023

Review Period: 2 years Owner: J Marshall

Page 22 Review date: Feb 2025 TPU 1874A Rev 14 - Revised: February 2023 Owner : Stewart Mardle