



Vodafone Policy Detailed Requirements

Excavation Standard

Policy Owner:	Policy Champion:	Version:	Date:
David Fry	Eileen Roddis	Version 1	May 2021

Purpose	Scope
The purpose of this Standard is to ensure the health and safety of personnel carrying out works and to identify and manage underground services both in preparation and undertaking of excavation activities. It also takes into consideration the protection of the Environment. Planning must consider the management of resources, processes and equipment that apply to the work activity.	This Standard applies to all Excavation and cable in the ground activities by or on behalf of Vodafone UK Ltd. This includes suppliers who deliver underground cabling activities for Vodafone and, through them, all sub-contractors they may appoint to support them with this task.
Compliance levels are monitored and reviewed by appropriate governance bodies. Any breach will be treated as a serious disciplinary offence and may be subject to disciplinary action.	

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1. Policy Principles

All parties, including Contractors must comply with the requirements of HSE guidance HSG 47 “Avoiding danger from underground services”, which requires the use of plans, detection devices and safe digging procedures including where appropriate hand digging trial holes to confirm the line and depth of services. A permit to dig system, or equal Risk Mitigation process must be in place, prior to any excavations commencing.

Excavations must be adequately supported to prevent falls of material or earth, which may endanger any person. Where excavations are undertaken close to buildings or structures, due regard must be taken of the additional loads imposed. Excavations must have suitable barriers and, where appropriate, lights and signage.

Reasonable steps must be taken to prevent unauthorised access to excavations, including trespassers.

The principles set out in this document are based upon guidance in the following:-

- HSG47 – Avoiding danger from underground services
- PAS128 – Underground Utility Detection, Verification and Location
- The Utilities Strike Avoidance Group guidance

This document does not, in itself, prescribe all of Vodafone UK’s Streetworks and Digging arrangements, it forms part of a larger management system for controlling health and safety risks.

1.1 Definitions

Excavation – The act or process of digging whether by hand or plant and machinery.

Pre-construction information – Existing information that is available before any works start.

HSG 47 – Health and Safety Executive guidance on avoiding dangers from underground services.

PAS128 – British Standards Institution PAS 128, Specification for underground utility detection, verification and location

Safe System of Work (SSOW) – A set agreed procedure to which the task must be carried out and detail actions required to minimise identified risks.

Permit to Dig / Break Ground – A control measure to ensure that works will be undertaken in accordance with the agreed SSOW.

Competent Persons – The Management of Health and Safety at Work Regulations 1999 define a competent person as someone with 'sufficient knowledge and experience' to do the job properly. Employers are responsible for carrying out the assessment, and for any steps that they need to take to eliminate or control risk, including training.

Cable Avoidance Tool (CAT) – Used for detecting underground services and normally used before and during works.

GPR – Ground penetration radar. A comprehensive survey to detect all services in the ground. This is normally carried out at preconstruction stage.

2. Policy Controls and Deliverables Required for Compliance

2.1 Service Avoidance Procedure

Where possible at pre-construction/design stage, hazards should be designed out by following a hierarchical approach, as detailed below:

- Obtaining the best existing information available
- Avoiding services by repositioning where reasonably practicable.
- Using construction methods that avoid services.
- Arranging for supplies to be disconnected where services cannot be avoided and where reasonably practicable.
- Highlighting the residual risks and developing a plan.



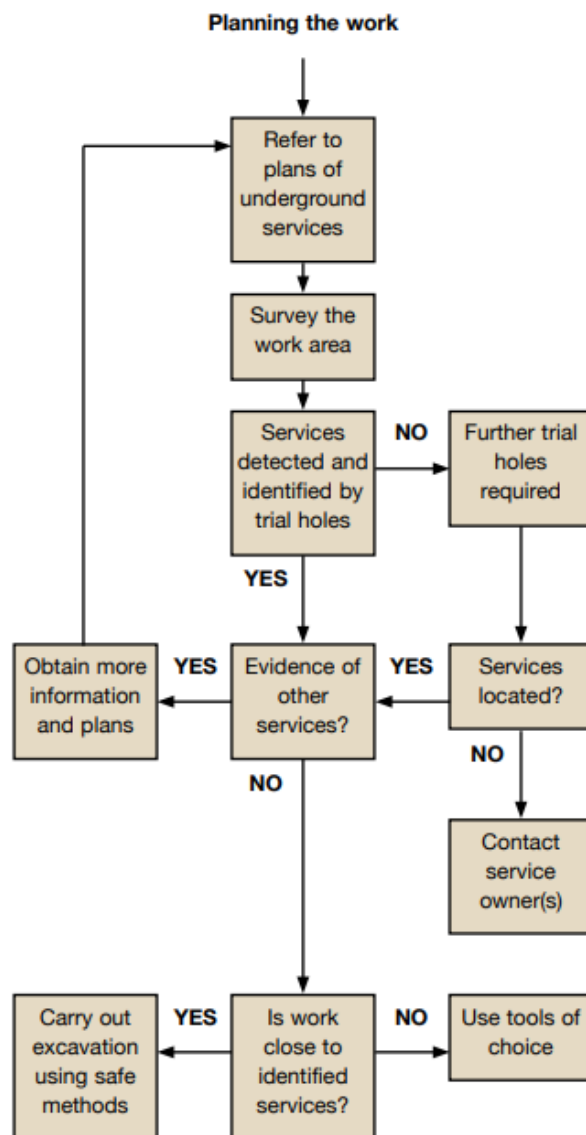
It is the responsibility of the nominated Vodafone Project Representative/Managers/Principal Designers, to ensure Pre-Construction information is made available to the contractor.

2.2 Service Avoidance Planning

Service Avoidance Planning is used to clearly identify the extent of the work area and find out what underground services are within the area before considering whether they are likely to be disturbed. Key stages in service avoidance planning include

- Contact the service owner and obtain service drawings from utilities companies and other organisations with relevant information about the site.
- Survey the site to identify the services and other underground structures. Record the location of any services.
- Review/assess the planned work to avoid disturbing services where possible.
- Allow sufficient time and provide sufficient resource to do the work safely.
- Emergency work still requires planning and assessment of the risks arising from the work. A precautionary approach must be taken when breaking ground.

A brief look at the process from referring to plans on site to the start of work near underground services





2.3 Surveying & Recording Services

Where surveys are to be undertaken, they must be clear, concise and shall identify and record all service data points and shall include;

- Service type
- Location
- Depth.

Where services have been disconnected, removed or diverted during the construction phase, the on-site plans will need to be updated. It is also important to provide photographs of such works to support the plans.

All new installed services must be identified on as built drawings and be available on site for review.

An alternative source of information is www.linesearchbeforeudig.co.uk

2.4 Pre-Construction

Information gathered during Service Avoidance Planning and Surveying / Recording Services stage of the project must be communicated and made available to the Project Delivery team, including Contractors. These must include all relevant pre-existing and new information such as services surveys and associated drawings. All surveys and associated drawings should be discussed in detail identifying the high-risk areas and the measures required to avoid contact with any live services.

2.5 Project Execution

Risk Assessment & Method Statement

The Contractor must produce their own SSOW identifying all necessary controls relevant working around/near live services. Any SSOW/RAMS is suitable and sufficient for the task.

Risk Assessments must include consideration of the following hazards*:-

- Collapse of the sides;
- Underground services;
- Contaminated ground;
- Fall of materials, persons, plant or equipment into the excavation;
- Confined spaces – poisonous or explosive atmospheres or lack of oxygen;
- Flooding;
- Overhead services;
- Moving plant – injury to person;
- Lifting operations;
- Undermining adjacent structures or services;
- Surcharging the sides of an excavation
- Traffic Management
- Environmental impacts

* - This list is not exhaustive

Control measures should include*:-

- Protection of person(s) installing a support system;
- Safe exposure and, if necessary, support of underground services;
- Safe access and egress from the excavation;
- Adequate ventilation of the workspace;
- Dewatering the trench if necessary;
- The need for inspections of the excavation by a competent person;

UK Detailed Requirements or Specialist Guidance

Name of document: Excavation Procedure



- The stability of adjacent structures or land;
- Guarding and lighting where necessary;
- Soil stability;
- Soils differ depending upon their composition which affects their behaviour. Fine sand, flow easily, whereas like stiff clay is more cohesive. No soil, whatever its structure can be relied upon to support its own weight and, if a trench or excavation cannot be made safe by battering or stepping the sides, some form of support will be required. Loose and fractured rock will also need some support;
- Water is almost always present, even if only as moisture in the soil. The water content of soil can change its behaviour considerably and must be taken into account;
- Thrust boring, directional drilling and pipe jacking are examples of trenchless techniques. Some of the trenchless methods still require the excavation of pits at either end of the 'trenchless run' in order to launch and retrieve the boring equipment;
- If battering the sides of an excavation, the angle at which the sides are cut will depend upon:
 - The nature of the soil (which may be a mixture of materials);
 - The water content of the soil, including any increase or decrease whilst the excavation is open.

** - This list is not exhaustive*

The Contractor is responsible to ensure competence for those carrying out the task, carry out on site checks following the marking of service locations and give authorisation to proceed via a Permit to Dig / Break Ground, or equivalent Risk Mitigation.

Check the operative who is using the CAT and Genny has provided evidence of manufacturers (or other approved) training on the use of equipment.

Detecting, Identifying and Marking Underground Services

All detection equipment used on Vodafone projects must meet the minimum standards listed below:

- The selection of equipment must be based on the risk, environment and type of service
- Where selected for use, the CAT must be used in tandem with the Genny
- Users to be fully trained in the specific model of detection being used
- Must have full data logging capability
- Data captured must include GPS location
- All data captured during the scan must be made available to Vodafone
- All data captured must be stored for a minimum of 12 months

Marking Out

The marking of underground services is an essential part of a safe system of work and supports both safe digging practices for avoiding buried services. It also gives a visual reminder of what is below ground or hidden.

It is essential that all markings pass on through the area to be excavated or the service exposed so that the markings are not removed once the works are complete.

Isolation

Where possible services must be isolated before any works commence. If services cannot be isolated then an appropriate Safe System of Work is required (for working around live services), approved and permit issued before works start.

Permit to Work

A Permit to Dig / Break Ground, or equivalent Risk Mitigation, is to be used for works involving excavations, and any other type of surface penetration.



The permit must be completed by the trade contractor. Details required in the permit must be clear and relevant to the task being carried out. It is important that this reflects the agreed Safe System of Works (Contractors RAMS) and once agreed, briefed out to all relevant persons on site?

Where work deviates away from the approved works, works must stop, and existing permit cancelled. The task must be reviewed again, and a safe system of work agreed before a new permit is issued or register updated.

When works have been completed the permit must be closed. Where necessary close out is to be accompanied with relevant mark-up drawings and photographs.

Safe Excavation

Excavations should be carried out carefully and should follow recognised safe digging practices as set out in HSG47. You must determine the method or technique for excavating near underground services before work starts, taking account of:

- The nature and scope of the work
- The type, position and status of underground services
- The ground conditions
- Site constraints

Every effort should be taken to excavate alongside the service rather than directly above to avoid it.

Where excavations are required close to buried services, hand digging will be required once the hard surfaces have been carefully broken out. Hand digging with insulated tools will also be required where services may not be indicated on plans but where cable and pipe detection devices indicate a possible presence. Cable avoidance tools must be used at all times while excavating and checks be carried out at periodic intervals, including the sides of the excavation.

You must prove at least 300mm clearance above any services under the base of tarmac, before breaking out the ground directly above a traced service by mechanical means.

The [Strike Avoidance Wheel \(USAG\)](#) and/or guidance from the service owner must be used to determine the safe distance for use of excavators and mechanical handheld tools e.g. breakers. Excavators and mechanical handheld tools MUST NOT be used closer than the safe distance. This also allows avoidance of valve housings, siphons and standpipes which may not identified on plans. Appropriate safety margins for use of mechanical excavators or handheld power tools near buried services are explained in HSG47.

When a service has been exposed along the full length of your excavation. Spades and shovels with curved edges and insulated handles should be used (eased carefully into the ground), with sharp objects such as picks and forks used only where absolutely necessary, e.g. to free lumps of stone or to break up hard layers that are not amenable to use of spades and shovels.

A proprietary compressed air or hydro jet digging tool (which removes soil with a high velocity jet of water or air) may be used to excavate and expose buried services. Vacuum excavators may also be used.

Backfilling underground services

Backfilling of any excavation should be done carefully to make sure that services are not damaged. Put back warning tiles, tape etc in their original position above the services unless visual examination after exposure showed this to be incorrect, in which case replace them above the service to which they refer.

Do not use warning tape for any other purpose (for example, guarding an excavation) and do not discard it in an excavation during backfilling.



Backfill materials containing items likely to damage the services, such as large pieces of rock and hard core, should not be used

Cable Avoidance Tool (CAT) & Handheld Tool Selection

The decision on what CAT you select must be based on a risk assessment approach and reduce the risk of an underground service strike to as low as reasonably practicable (ALARP).

The choice of tool can reduce the risk to yourself and minimise the risk of damage to installed services. Spades and shovels are less likely to pierce cables than picks, forks or other sharp tools. This standard mandates that all digging / trenching tools must be insulated.

Discovery of uncharted service during a “live” permit to dig

In the event of the discovery of an uncharted/ unmarked service, work should be stopped immediately, and the operative must contact the Authoriser (person who issued the permit) for further instruction on how to proceed. The Authoriser may cancel the original permit document and issue a new permit to reflect the current conditions on site

Damage to a Service

If a service is damaged:

- STOP work immediately
- REPORT the damage to the Authoriser (who must immediately contact the appropriate utility provider)
- DO NOT resume work until the utility provider and or Authoriser deems the area safe
- ONLY RECOMMENCE work once an amended or replacement permit has been issued

No further work should be undertaken in the vicinity of any damaged service until the Utility owner has investigated its condition and given approval for work to recommence. Emergency contact details of the Authoriser and the utility provider must be available on site to ensure immediate reporting.

Note that all service strikes must be reported to Vodafone onsite team via current reporting function and also EcoOnline reporting tool or the HSE Helpdesk, (03333 04 6666).

Vodafone classify a service utility strike as a high potential event, as such a full investigation must be completed identifying root cause and clear actions to prevent a recurrence.

Emergencies

Emergency contacts (including telephone numbers) must be made available in the event of a damaged service or other emergency.

First aid arrangements must be considered and made readily available where appropriate.

All personnel must be instructed and be aware of the action to be taken in the event of any emergency including any degree of damage to a service

Fencing & Covering of Excavations and Edges

Excavations near which persons work or pass must be protected to prevent persons from falling in. In such cases guard rails or barrier boards should be provided or, alternatively, the excavation should be securely covered.

Excavations must not be left open and or uncovered after hours, weekends. "Danger - Keep Out" signs should be posted

It is important that materials, plant and machinery etc. must be kept away from the edges of all excavations to avoid collapse of the sides and the risk of materials, etc, falling onto persons working in the excavation



Inspection and Examination of Excavations

Excavations which are supported to prevent any person being buried or trapped by a collapse or fall of material should be regularly inspected at the start of every shift – before work commences and after any event likely to have affected the strength or stability of the excavation. Inspections should also be carried out after any accidental fall of material

Service Location records

Where new services have been installed or existing services changed/diverted, it is important that the project team keep records of type, location and depth of each service. Record information must be clear, concise and made available to relevant contractors during the construction process. All services records must be stored in an accessible format.

2.6 Environmental Impacts

Water Pollution

Works should be planned and carried out in a manner which prevents pollution to watercourses and groundwater. It is an offence to cause or knowingly permit any polluting matter or trade effluent to enter surface waters or groundwaters without a prior discharge consent being obtained from the relevant authority. This includes contamination with silt from run-off or de-watering activities.

It is also an offence to impede or obstruct the flow of a watercourse, or to abstract water without an appropriate consent or licence. The Environment Agency (in England and Wales), SEPA (in Scotland) or the NIEA (in Northern Ireland) must be consulted prior to undertaking works in, under, over or in the vicinity of rivers, watercourses or flood defences. Permission for this type of work can take up to four months to obtain.

Potential pollutants include, silt, cement and concrete, chemicals and solvents, bridge cleaning debris and waste materials.

Working in or near Water

Work on bridges or other structures over or next to watercourses have a high risk of causing pollution and may require authorisation from the Environment Agency (in England and Wales), SEPA (in Scotland) or the NIEA (in Northern Ireland). Dust, debris and wastewater are the most common pollutants produced by working on bridges. A containment system should be used to reduce the risk of pollution. The system should take account of the sensitivity of the environment. Any methods should be agreed with the relevant body before works commence.

Water Pollution - Actions Required

Control measures must be implemented to reduce risk of pollution, which may include but are not limited to;

- Site surveys and, if necessary, meetings with the appropriate environmental regulator undertaken to identify surface waters or groundwaters that could be at risk
- Where pumping of underground chambers is required, any water contaminated with oil, silts or other pollutants must be pumped, contained and disposed of appropriately off site
- Prior consent to undertake the works or discharge to a watercourse obtained from the regulator
- Appropriate storage of all materials on site away from watercourses and drains and in compliance with manufacturers' Safety Data Sheets and COSHH requirements. This is of particular relevance to liquids such as chemicals and oils which should be stored away from moving vehicles, on drip trays where appropriate and always in compliance with relevant legal requirements such as the Oil Storage Regulations
- Appropriate storage of spoil to prevent it entering road gullies or watercourses, using drain covers where required
- Regular inspections of material storage areas, drips trays, and site discharges
- Procedures for re-fuelling of vehicles or plant including drip trays or absorbent mats at filling points, and drain covers



- Emergency plans and procedures in place in case of spillage, including availability of materials to clean up spill
- Approval from the relevant water authority to use standpipes
- Drip trays for plant and machinery stored stationary for prolonged periods (should be on hard standing where possible)
- Installation of separators or settlement tanks where appropriate

Waste Management and Resource Efficiency

A key environmental hazard is disposal of excavated waste from cable duct laying and network installation activities. The waste hierarchy should always be considered when planning activities – Reduce, Reuse, Recycle, Recovery (e.g. energy from waste), Dispose.

Waste management arrangements should be defined at the planning stages of a project.

Escape of waste must be prevented, and it must only be passed to authorised parties for transport, treatment or disposal. It is an offence to mix hazardous waste with non-hazardous waste. Specific records – Waste Transfer Notes and Hazardous Waste Consignment Notes - must be used when transferring waste.

Waste Management and Resource efficiency - Actions Required

Control measures must be implemented to ensure compliance, which may include but are not limited to the following:

- Opportunities to reduce waste should be identified
- Segregation of waste on site to enable reuse or recycling
- Appropriate arrangements must be put in place for storage of waste to prevent its escape. Contaminated spoil should be stored on hard standing or isolated from the underlying ground. Skips should be in good condition and covered to prevent rain ingress
- Hazardous waste must not be mixed with non-hazardous waste
- Checks should be carried out to ensure the contractors removing waste from site hold a valid waste carriers licence, that waste is only taken to a site with a valid environmental permit, waste management licence or exemption and that all waste movements must be accompanied by Duty of Care documentation. This includes a waste transfer note (to be kept on file for 2 years) or consignment note for hazardous waste (kept for 3 years)
- Identify opportunities to reuse materials or use recycled materials in re-instatement works

Nuisance – Dust, Noise, vibration and Odours

Dust, noise, vibration and odour can be a major source of complaint during construction works. If inadequately managed this could result in a nuisance being caused and an abatement notice being served by the local authority, outlining specific requirements that must be met or for works to cease. Consultation with relevant parties (e.g. local authority, local business, residents, schools) will ensure that the risk of complaint is kept to a minimum.

Contractors must have a procedure in place for handling, investigating and resolving complaints. They must notify Vodafone of any complaints received and of actions taken to resolve.

Nuisance - Actions Required

Control measures must be implemented to reduce risk of complaint, which may include but are not limited to:

- Restrictions on timing or phasing of works (this may be required by the environmental regulator, local authority or client)
- Adequate maintenance of plant
- Appropriate store waste and materials
- Pre-notifying local residents in advance of particularly disruptive works



- Consider using silencing/baffling equipment or selection of quieter plant, water lubrication on equipment such as angle grinders and directional reversing alarms
- Screen the source of noise
- Damp down using water to prevent dust, clean vehicle tyres

Any complaints that are escalated to a local authority or other relevant body must be notified to the HSE team via the Vodafone HSE incident reporting line.

Wildlife

During the works, measures must be taken to protect flora and fauna and prevent spread of invasive or injurious species. Certain plants are protected, and indigenous wild plants such as bluebells, orchids and primroses must not be disturbed or removed. Written approval is required from the Local Planning Authority before protected hedgerows can be removed ('removal' includes damage to roots) and any removal should only be undertaken in consultation with the landowner.

Certain plants are classified as invasive or injurious and these include Common ragwort, Giant hogweed, Japanese knotweed and Himalayan balsam. It is an offence to allow the spread of invasive species.

Damage to trees and their roots must be prevented – common causes include compaction, raising soil levels, impervious covering around the tree roots, hazardous spillages, soil stripping or excavations.

Certain species of wildlife are protected and careful planning is required if the works could affect their habitat. The following are examples of protected species:

- Badgers
- Newts
- Toads
- Bats
- Dormouse
- Red squirrel
- Reptiles
- Birds of prey (and specific species of birds, their nests, and eggs)

Wildlife - Actions Required

Control measures may include but are not limited to:

- Keeping plant and vehicles away from trees
- Prevent excavation of any kind within the protected zone of a tree (1m of tree trunk) and prevent mechanical excavation within precautionary zone (4 x circumference of tree trunk). Prevent cutting of roots
- Outside of the protected and precautionary zones, roots must not be cut without prior advice from the local authority tree officer
- Carry out surveys and discussions with client to identify areas where protected species may be present
- Unexpected identification of protected species must be reported to the Vodafone site supervisor, or equivalent competent person, and advice sought from the HSE&W Team. All works in the area must be stopped immediately
- Similarly, unexpected identification of invasive species must be reported to the Vodafone site supervisor, or equivalent competent person. Seek expert advice on suitable treatment of invasive and injurious species

See '[NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in the Proximity of Trees Volume 4](#)' for more information on working near trees.



Land use

Special care will be required when working in protected areas or designated sites, examples of which include SSSIs, Areas of Outstanding Natural Beauty, nature reserves and national parks. Prior agreement is essential before carrying out works in these areas. The bullet points below provide guidance on who should be contacted for different areas of designation:

- Local Nature Reserve – local planning authority
- National Nature Reserve, Site of Special Scientific Interest, Marine Nature Reserve – Natural England (in England), Scottish Natural Heritage (in Scotland), the Countryside Council for Wales (in Wales) or the Planning Authority (in Northern Ireland)
- Listed Buildings and Ancient Monuments – local planning authority
- a National Park, the Broads, the New Forest or a Limestone Pavement Area – local planning authority
- National Trust Land – relevant regional office

It is possible to identify special designations in England, Wales or Scotland using the website:
<http://magic.defra.gov.uk/>.

Local knowledge, client information and observations from planning surveys can also be good sources of information on special designations.

Any working methods agreed with the authority must be adhered to.

Archaeological sites

Archaeological remains are irreplaceable and may be found above and below ground. Prior consent will need to be obtained before carrying out works in the vicinity of Ancient Scheduled Monuments. The client should be able to provide information relating to any archaeological remains or scheduled monuments on site. The proposed method of working must ensure that any contractual obligations are complied with and provide the necessary protection. For example, vibration can cause cracks and subsidence in listed buildings; access roads could disturb historic areas; de-watering could also cause subsidence.

If during the works, archaeological finds are discovered, work must be stopped immediately, management notified, and the local authority contacted.

Contaminated land

Where excavations are planned at a site there is a risk that contaminated land will be exposed. The Vodafone Supervisor (or equivalent competent person) must ensure that the environmental risks of contamination are assessed and understood prior to commencement of works. An appropriate person such as a planner or designer must assess the risk of contamination based on the history of the site. Where risk of contamination is suspected expert advice and analysis will usually be required. The HSE department should be contacted for advice and recommendations on specialist contractors.

All colleagues and contractors must be briefed on the risks of working with contamination and adequate controls put in place to manage those risks. Method statements and site inductions must be carried out so that everyone on site knows what to do.

If evidence of contamination is discovered unexpectedly then work must be stopped and the source of contamination investigated

Where contaminated materials are to be removed and disposed of off-site it is the responsibility of the Vodafone Supervisor or equivalent person to ensure that an appropriate waste management company is used and that Duty of Care records are obtained (see Waste Management)



3. Roles and responsibilities

Person(s) instructing a supplier or other to undertake works on behalf of Vodafone:

- Ensure that works are appropriately planned to include provision of suitable and sufficient risk assessments for the activities being undertaken.
- Undertake audits & documented checks to ensure the supplier is working in accordance with their health and safety plan, risk assessments and requirements of relevant Vodafone policies.
- Provide Pre-Construction information to the key stakeholders.
- Escalate any concerns regarding supplier health and safety performance to the Health & Safety team.

Supply Chain:

- Work in accordance with this standard, the Supplier Health and Safety Policy and in line with HSG 47.
- Support the person(s) instructing the work by ensuring competent Suppliers and Individuals are engaged to carry out the works.

Supplier:

- Work in accordance with this standard, the Supplier Health and Safety Policy and in line with HSG 47.
- Ensure works are appropriately planned, including provision of suitable and sufficient risk assessments. Environmental impacts must be included in the Risk Assessment process.
- Provide to Vodafone regular reporting and review of health and safety performance including incident statistics, site inspections, emerging risks, health and safety initiatives and any other relevant data.

Health & Safety Team:

- Provide support and guidance to assist in the implementation of this standard.
- Investigate all incidents, accidents & near misses involving excavations and service strikes.

4. Exceptions

Any exception or exemption to the controls set out in this document must be agreed by the HS&E team by contacting HSE.Helpline@Vodafone.com.

5. Supporting documents

Appendix 1 – CDM Roles and Responsibilities

[Best Practice in Avoiding Underground Services](#)

[Best Practice for Permits to Dig / Permits to Excavate / Permits to work near underground services](#)

[Strike Avoidance Wheel \(USAG\)](#)

5.1 References

[Health and Safety at Work Act 1974](#)

[Management of Health and Safety at Work Regulations 1999](#)

[HSG 47 – Avoiding Danger from Underground Services](#)

[Construction, Design & Management Regulations 2015](#)

[Provision of Use of Work and Equipment Regulations 1998](#)

[Electricity at Work Regulations 1989](#)

[Gas Safety Management Regulations 1996](#)

[Volume 4: Street Works UK Guidelines For The Planning, Installation And Maintenance Of Utility Apparatus In Proximity To Trees \(Issue 2\) <http://streetworks.org.uk/resources/publications/>](#)

[Environmental guidance and best practice for Construction with compliance advice for Scotland and N Ireland <https://www.netregs.org.uk/business-sectors/construction/>](#)



Appendix 1

Client

Clients have a duty to make reasonable enquiries about underground services and pass relevant information to the designer(s) and contractor(s). Your own files and other records may contain information on underground services. If they do, remember that it may have been obtained for previous work and may be out of date. The most up-to-date information should be included in the tender information.

A client who is unable or unwilling to obtain this information must allow the contractor sufficient time and resource to do so instead.

Clients need to consider how contractors have addressed the risks from underground services.

Principal Designer / Designer

Designers have a duty to reduce or 'design out' the risks arising from damage to underground services. Having reduced the risks to a level as low as reasonably practicable by design, information should be provided to those doing the work about the risks that remain. In most cases, the best way of informing contractors and individuals doing the work is by providing this on working drawings.

You will need to know if there are underground services present so that you can amend the design to avoid them where possible.

For building work, re-siting the services away from the work is often a reasonably practicable means of avoiding the risk. Ask the service owner/operator to do this and include adequate notice.

Principal Contractor

Principal Contractors must prepare safe systems of work by identifying the hazards they are likely to encounter during the work and making a suitable and sufficient assessment of the risks posed by those hazards. Clear information on the type, location and status of underground services and the tools, equipment and working practices they will require to avoid damaging the services is essential.

Make sure that those doing the work have sufficient information, clear instruction and training to work safely, and that proper management and supervision of the work ensures that it is done safely.

Contractors

Any person undertaking work or in charge of works that involves penetration, excavation or disturbance of ground greater than 50mm in depth must be aware of this standard, have a working knowledge of HSG 47, obtained a permit to dig and confirm that they:

- Have read, understood & acknowledged the activity specific risk assessment
- Have read and understood the safe system of work
- Have seen any associated utility drawings
- Are in receipt of the relevant emergency contact details prior to work commencing

Individuals using service detection equipment (CAT & Genny) must be adequately trained and understand its limitations



6. Document history

Version	Date	Changes	Other Standards affected	Approved by
1.0	Feb 2022	New document		Eileen Roddis