SA103 Smart Awards FTTP Installation – Pre-enablement

QUALIFICATION SPECIFICATION

Introduction

This qualification covers the installation of a FTTP circuit from a termination point in the overhead or underground network up to the customer premises. Learners are provided with the knowledge and skills to identify the hazards and potential risks involved in working safely in the overhead and underground networks when installing fibre cable to a customer's premises. It also helps learners' awareness of compliance with health and safety legislation.

This qualification is aimed at those individuals who undertake work in a telecommunication (or similar utility) environment. This qualification tests learners' knowledge, skills and ability when installing cables in the overhead and underground network. The module covers the dangers associated with the work, the safety precautions and the quality standards required whilst installing fibre.

This qualification ensures that learners involved in the installation of overhead fibre cables and equipment are suitably trained. This qualification does not cover rooftop working, digging/excavation techniques, or blown fibre.

Key Information	
Name	Smart Awards Level 2 SA103 Smart Awards FTTP Installation – Pre-enablement
Accreditation	This qualification is approved by: • Industry qualification SA103
Level	2
Duration	1 day
Guided Learning Hours (Ofqual)	8 hours
Time/Notional Learning Hours (SQA Accreditation)	
Ofqual Total Qualification	
RQF - Ofqual Credit - Credit value represents the size of a unit which is determined by the learning time. One credit = 10 hours of notional learning.	1
Age	16 Plus
Qualification Type	Vocationally Related Qualification
Smart Awards Product Area	Safety and Craft Qualifications
Sector Subject Area	5.2 - Building and construction
Certification	This qualification is valid for a period of three (3) years from the date of certificate issue. To remain compliant and eligible to work on telecommunications networks, individuals must renew their qualification before the expiry date.

Network Operative Passport Scheme (NOPS)	This qualification is fully aligned with the requirements of the Network Operative Passport Scheme (NOPS). Successful completion of this qualification is recorded within the NOPS system, ensuring operatives are visible and verifiable to employers and site access systems across the industry.
Prerequisites and Entry Requirements	Learners MUST complete the following safety prerequisites for internal, underground and overhead working in advance of this qualification: **Internal** SA029 Working Safely in a Single Dwelling Unit **Overhead** SA001 Overhead Safety or SA009 Overhead Safety & Cable Installation over Obstacles **Underground** SA002 Safety Underground or SA006 Safe Working in Civils There are no formal entry requirements and Smart Awards will not restrict access on the grounds of prior academic attainment, employment, geographic location, or any other grounds. There are no barriers that restrict access or progression, thereby promoting equality. Learners must have a basic understanding of the English language to ensure they can meet the requirements of the qualification. **Please note:** The New Roads and Street Works Act 1991 (NRSWA) require at least one person on site to hold a Street Works card to work on the highway. This Smart Awards accreditation is based on a pre-requisite that any work on the highway requires appropriate Street Works accreditation to be held by an individual working on site, and that this individual is qualified to check that the planned provision of footways, traffic lanes and safety zones determined by the site survey meets with the requirements of the site location and approved procedures and practices required by the NRSWA 1991. Some companies' policies may vary where more than one person on site is required to hold a valid Street Works card.
Mandatory units and optional routes to completion.	Learners must complete the Smart Awards FTTP Installation – Pre-enablement unit in full to achieve this qualification. No optional units or routes are available.
Additional requirements to achieve this qualification.	None

Methods of Assessment	This qualification will be assessed through a practical and theory test. The aim of the assessment is to ensure successful learners have adequate knowledge and understanding of FTTP Installation – Pre-enablement. Assessment guidance, assessor requirements and additional qualification documentation is supplied to approved Smart Awards centres via Quartz.
Theory test	Learners are required to pass a 30-question multiple-choice test, with questions randomly selected from a secure question bank to ensure comprehensive coverage of all assessment criteria. The test is timed, and learners will have 45 minutes to complete it. All multiple-choice tests are conducted online via the Smart Awards online assessment platform.
Practical assessment	Learners will be required to demonstrate their practical skills through a series of tasks set by Smart Awards. These will be assessed by direct observation of the learner performing the task under assessment conditions. The assessment area must be equipped sufficiently so that the learner can be assessed in their competencies safely and without anyone providing guidance to help the learner. Assessor Role: To observe, record performance, question learners where clarification is needed, and verify competence against set criteria. Assessors should evaluate learners against the following categories: • Learners must be assessed individually, even in a team simulation. • Use Smart Awards standardised observation checklist for consistency. • Ensure opportunities for questioning are built into the simulation, particularly regarding reasoning behind technique and decision-making. • In cases of unsupervised elements, probe for ownership of work through reflective questioning. • Provide a brief debriefing session after the assessment to give feedback and confirm understanding. The learner will have 3 hours to complete the practical assessment

Grading	Learners will be graded (Fail or Pass) on an achievement or non-achievement basis.
	
	The final grade will be determined by collective performance in the two assessment tools (theory and practical).
	Learners are required to achieve both the theory and practical assessments to achieve the qualification.
	
	• Theory - To achieve a pass, 80% or more is required.
	• Practical - If one major fault is given the learner will automatically fail.
	  o If 7 or more minor faults are given the learner will fail.
	  o The learner needs to achieve 6 or less minor faults to pass.

	If there are major health and safety failures due to learners' actions or understanding, the assessment MUST be stopped. The learner should be taken to a suitable area to be explained the reason for stopping the assessment and that his assessment is deemed as failed. Guidance on the major failures that should result in stopping the assessment is provided in the practical assessment.
Reasonable adjustments and special considerations	Smart Awards approved centres that have learners with specific requirements should refer to the Smart Awards Reasonable Adjustments and Special Considerations Policy and Procedure. This document outlines the support available to ensure fair access to assessments. It can be found on the Smart Awards website at www.smartawards.co.uk
Recognition of Prior Learning	Smart Awards is committed to supporting Recognition of Prior Learning (RPL) and has established a dedicated policy and set of procedures to guide and assist approved centres in its implementation. The full policy is available on the Smart Awards website at www.smartawards.co.uk
Required resources and site requirements for delivering this Qualification	The practical assessment area must be a simulated environment and approved by Smart Awards before conducting the assessment. The area requires mandatory: • A minimum of 1 pole (minimum height 9m) per learner fitted with a ring head and a FTTP termination point. • A solid structure which simulates a customer premises. • A simulated road crossing between the pole and the solid structure. • Ability to span a cable from a pole to a solid structure, not crossing a carriageway. • An underground chamber with an FTTP termination point installed • Duct from the underground chamber to a solid structure which simulates a customer premises. • Gate guards, ladder fastening/lashing rope (securing the ladder to pole), ladders, pole test equipment, measuring rods • Ladder fall arrest system (equipment) where applicable Note: Overhead and underground networks should be populated with different types of Fibre Block Terminal so that the leaner can demonstrate termination on different types of the more common FTTP equipment. Practical Equipment • Appropriately checked and safe ladder and pole climbing equipment. Use of specific equipment used by the learner is encouraged and, in some cases, may be mandatory requirement of the utility and/or the employer • Brackets/eyebolts • Cable dispenser • Sash line • Cable fixings

	• Cable clamps • Pole belt 1b • Pulleys • Rods telescopic • Hammer • GDU • Box key • Roller bar • Overhead and underground fibre installation cables • Customer Splice/Service Point • Cable ties • Fibre cleaning kit

Qualification Structure

The Level 2 Award in FTTP Installation – Pre-enablement qualification consists of one mandatory unit, which learners must complete to achieve the qualification. Attainment at Level 2 demonstrates the learner's ability to apply relevant knowledge, skills, and procedures to carry out clearly defined tasks and resolve straightforward problems with appropriate direction or supervision.

SMART AWARDS Level 2 Award in FTTP Installation – Pre-enablement								
Minimum TQT for this pathway = 8 Minimum number of credits = 1 Minimum number of units = 1			Minimum number of GLH = 8 Minimum number of assessment time = 4 Other learning time = 0					
Unit Number	**Unit title**	**Level**	**M/O**	**GLH**	**ASS**	**OTHER LEARNING**	**TQT**	**CREDITS**
	FTTP Installation – Pre-enablement	2	M	8	4	0	8	1

Learner Support and Assessment Conditions

Learners will have access to support throughout the training period via their trainer. Trainers are responsible for ensuring that each learner is adequately prepared and competent before presenting them for assessment.

No support or assistance may be given to the learner during either the theory or practical assessments, to maintain the integrity and validity of the qualification.

Qualification objectives and requirements

This qualification confirms that the learner has demonstrated the required competence to perform FTTP Installation – Pre-enablement. To successfully obtain this qualification, the learners will need to demonstrate the knowledge and ability requirements set out in the learning outcomes and assessment criteria.

Unit Title:	Smart Awards FTTP Installation – Pre-enablement
Unit Reference Number:	SA103
Learning Outcomes	Assessment Criteria

The learner will:	The learner can:
1. Be able to work safely	1.1. Identify the hazards and risks associated with the working area and the proposed work. 1.2. Complete work in a way which maintains health and safety and is consistent with relevant legislation and industry good practice. 1.3. Select and use correct climbing equipment and personal protective equipment (PPE). 1.4. Select and use the correct equipment and PPE for working in the underground.
2. Be able to Install a fibre cable from a pole to a customer's premises.	2.1. Carry out a hazard evaluation and Work at Height assessment of the pole prior to commencing the work 2.2. Perform all pre climb checks 2.3. Inspect access equipment to ensure it is safe and fit for use under manufacturer's instructions and relevant legislation. 2.4. Demonstrate the ability to ascend and descend pole in a controlled manner. 2.5. Select and install the correct bracket at the customers fixing point. 2.6. Demonstrate safe erection of a cable using the lift and fix method, where the span does not cross a carriageway. 2.7. Demonstrate safe erection of a fibre cable crossing a carriageway, ensuring correct tension and safety compliance. 2.8. Install the correct cable clamps and restrain the cable to the pole. 2.9. Carry out termination of fibre cable onto an overhead fibre block terminal, ensuring the fibre/connector is clean. 2.10. Confirm minimum wire height compliance in line with standards.
3. Be able to Install a fibre cable from an underground chamber to a customer's premises.	3.1. Prepare and guard the work area, ensuring all tools and equipment are safely contained. 3.2. Demonstrate safe access into the underground network. 3.3. Install a fibre cable from the underground chamber to the customer premises using an existing rope. 3.4. Carry out termination of a fibre cable onto an underground fibre block terminal, ensuring the fibre/connector is clean. 3.5. Demonstrate support and restraint new and existing cables within the underground chamber.
4. Be able to install a cable onto a customer's premises using the correct fixings.	4.1. Identify the most effective route and agree with the customer 4.2. Install cable on customers premises following agreed route. 4.3. Use the correct fixings and method to attach the cable to the premises. 4.4. Install cable while maintaining minimum bend radius requirements.

5. Be able to terminate a fibre cable onto a Customer Splice/Service Point	5.1. Fit Customer Splice/Service Point in agreed location on external wall. 5.2. Install cable within external Customer Splice/Service Point 5.3. Fit Customer Splice/Service Point in agreed location on internal wall. 5.4. Install a cable in internal Customer Splice/Service Point 5.5. Test the fibre cable for service continuity and record power/light level readings.
6. Know relevant health and safety legislation and industry good practice, including awareness of common network components.	6.1. Outline the key health and safety legislation and industry good practice. 6.2. List the key health and safety regulations that need to be observed when working at height 6.3. Describe how to use and maintain tools, equipment, and personal protective equipment. 6.4. Identify the emergency planning procedures relevant to the work area. 6.5. State the reasons for agreeing work with a customer before installation begins. 6.6. Recognise the importance of fibre cleanliness and how to clean fibre connectors. 6.7. Recognise why redundant drop wires are recovered and the process for recovery. 6.8. Know the common types of Connectorised Block Terminals (CBTs) and fibre block terminals commonly used by telecoms providers. 6.9. Know the sources of advice and guidance available on different makes and models of Customer Splice/Service Points. 6.10. Identify the potential hazards associated with pets and animal waste when carrying out FTTP pre-enablement activities.
7. Know how to install fibre cables from a pole to a customer's premises, safely and to a quality standard.	7.1. Describe the method of reporting unsafe or below standard plant/network. 7.2. Identify different types of labelling found on poles and explain their purpose. 7.3. List the required wire heights and maximum span lengths for overhead cabling. 7.4. Outline the pole loading requirements. 7.5. Describe what a Joint User Pole is and the rules for working on them. 7.6. Recognise the importance of using the correct cable clamps. 7.7. Outline the importance of not compromising a cable's minimum bend radius. 7.8. State the process for safe cable erection. 7.9. Outline the correct methods and fixings used when attaching cables to a customer's premises.

8. Know how to install fibre cables from an underground chamber to a customer's premises, safely and to a quality standard.	8.1. Define the process of preparing and guarding an underground work area. 8.2. State how to safely access and work within the underground network. 8.3. Describe the method for installing fibre using an existing draw rope or cable. 8.4. Outline the correct method for terminating a fibre cable in an underground fibre block terminal. 8.5. State the importance of supporting and restraining cables in an underground chamber.
9. Know how to install a Customer Splice/Service Point to a customer's premises, safely and to a quality standard.	9.1. Outline the process for selecting suitable internal and external locations for a Customer Splice/Service Point. 9.2. Describe how to complete visual and utility checks before drilling and why it's important. 9.3. Describe how to route and fix the fibre cable within the Customer Splice/Service Point. 9.4. Compare internal and external Customer Splice/Service Point and understand the requirements for each. 9.5. State the key checks to carry out after installation to confirm service readiness.