



Course Specification: Cable Avoidance Testing Course (One Day)

NOCN Group have produced this Assured Course in association with Leica Geosystems to promote safety in the construction industry.

The course aims to provide individuals with a knowledge and understanding of how the cable avoidance equipment works, its limitations, applications and the consequences of not implementing correct cable avoidance procedures. It will cover detecting and tracing methods.

This course will benefit all those who are required to use Cable Avoidance Tools as part of their working processes.

The outline, structure and content of this course is assured by NOCN Group.

Course Content

Course Objectives

By completing this course you will:

- Understand why we use cable avoidance equipment and the possible consequences of not using them.
- Be introduced to the theory of electromagnetic location and its limitations.
- Recognise the principles of risk assessment with regards to cable avoidance.
- Demonstrate the correct application of the equipment.
- Appreciate the importance of using both the transmitter and locator.

Course Breakdown

The course has both classroom and outdoor practical elements.

The classroom sessions cover:

- An overview of the cable avoidance product and how to operate it.
- How the antennas receive signals and how the correct application will provide more reliable results.
- What signals are received in the passive modes and how these signals are produced.
- Passive mode limitations.
- How to obtain reliable utility directions.
- The limitations of certain utilities (e.g. DC cables, plastic utilities, low currents, weak signals, capped cables, long wave transmission limitations).
- Product overview of the transmitter and how it operates.
- The modes and settings of the transmitter.
- The utilisation of low and high frequencies.
- Connection mode applications and possible limitations.
- Connecting methods.
- Accessories.
- Induction mode operation and applications.
- Correct depth estimation verification methods.

There are two practical elements to the course.

The first covers:

- The locator features, applications and passive mode.
- Marking up the detected utilities with chalk.

The second covers:

- Using the Transmitter in induction and connection methods to:
 - Record and trace the energised utilities
 - Complete practical assessment.

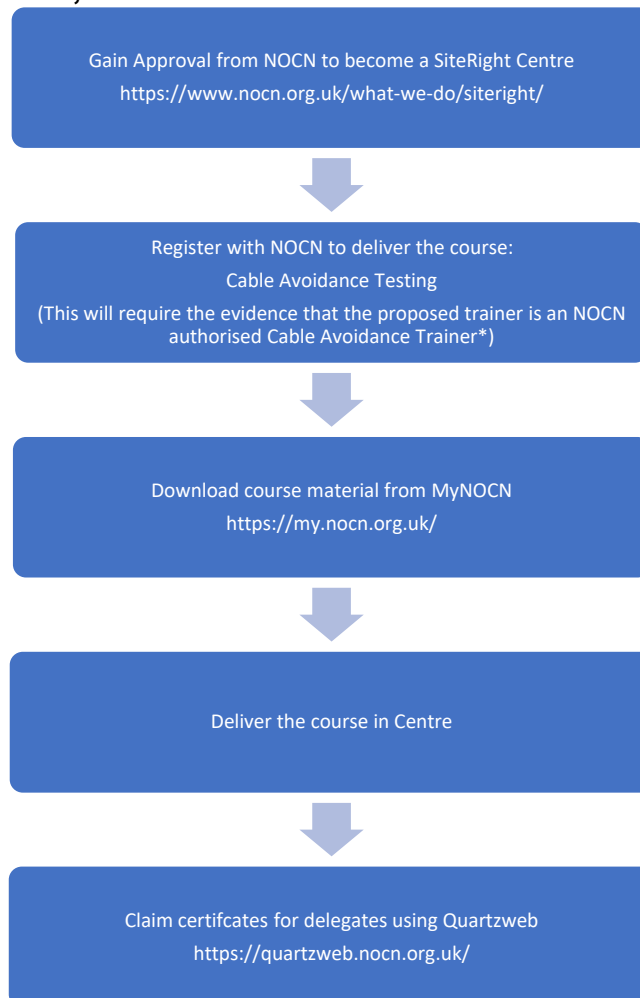
After the practical delegates will:

- Download and analyse data from one of the locators.

Course Approval

Prior to advertising or delivering this Assured Course, organisations must first gain Centre Approval from NOCN as well as gaining approval for each individual SiteRight Assured Course. For further information regarding gaining approval, please contact the NOCN Quality Assurance Team at assurance@nocn.org.uk or onboarding@nocn.org.uk.

Approval, Readiness, Deliver and Certification Process



***NOCN SiteRight Authorised Cable Avoidance Trainer Course is maintained by Leica Geosystems.**
For more information visit: <https://connect.leica-geosystems.com/Leica-UK-Detection-Training>



Trainer Requirements

A trainer is required to deliver this course. A trainer includes anyone within your centre who is facilitating the training to delegates in any environment e.g. tutor, trainer, teacher, coach, facilitator. That individual can also perform the role of assessor for this course.

NOCN SiteRight Authorised Cable Avoidance Trainer course

All trainers and assessors must:

- Hold verifiable knowledge of the cable avoidance tools with a minimum of 2 years' current experience of using EML equipment. This is mandatory for acceptance onto the NOCN SiteRight Authorised Cable Avoidance Trainer course.

Cable Avoidance Training

All trainers and assessors must:

- Every trainer must have completed the NOCN SiteRight Authorised Cable Avoidance Trainer course and be able to demonstrate this by presenting a valid certificate, issued on successful completion of the course.
- Hold or be working towards a recognised teaching/training or assessor qualification (dependent on their role), examples of what NOCN will accept are detailed within the Quality Assurance Manual.
- Keep up to date with industry best practice for the duration of their role.
- Maintain a record of Continuous Personal Development (CPD).
- Hold an up-to-date CV.

Please refer to the SiteRight Assured Course Quality Manual, available on the NOCN website for further tutor requirements.

Resource and Equipment Requirements

In order to deliver the course, the Centre must have access to and make use of the following resources and equipment:

Requirement	Detail
Training Environment	<ul style="list-style-type: none">• Clean and dry training area with adequate tables and chairs• Safe external area with multiple established buried utilities and connectable street furniture (street lamps, BT junction boxes etc.)
Tools	<ul style="list-style-type: none">• Cable Avoidance Equipment
Personal Protective Equipment (minimum)	<ul style="list-style-type: none">• Outdoor weather suitable clothing• High visibility clothing• Safety boots
Delivery	<ul style="list-style-type: none">• Laptop or desktop computer – Course delivery presentation• Paper and pens• Flipchart or whiteboard
Testing	<ul style="list-style-type: none">• Test Papers per delegate.



Course Delivery

The course must consist of a maximum of 8 delegates, unless pre-agreement is gained from NOCN. The course will be delivered over a single day period (7.5 hours).

The course is both theory-based, delivered via a presentation, and practical, delivered outside.

The NOCN assured training resources must be used to deliver the training. To ensure that the most up-to-date material is being used centres must download the material from MyNOCN each time, prior to delivery of a course. All surplus training material must be destroyed after each occasion that a course has been run.

The structure of the training is provided by the course PowerPoint and the tutor notes / lesson plan. Trainers are expected to use these resources to guarantee that delegates are witness to the total information required to successfully complete this course.

Assessment

There is 1 practical assessment and 1 multiple choice test.

The practical assessments performance must be recorded on appropriate paperwork by the assessor who supervises and observes the delegate(s).

The multiple choice test consists of 15 questions. The passmark is 80% (12 out of 15). A delegate who scores 11 out of 15 can be given a re-sit, answering only the questions in which they were unsuccessful during their first attempt. Any delegate who does not improve their score or who scores 10 or below in the first attempt should be advised to retake the whole course.

Once a delegate has achieved both the practical task and the multiple choice knowledge test their achievement and certification can take place.

Certification for this course is valid for 3 years from the date of training. To remain certified in this area, delegates will need to retake the course again before the certificate expires.

Trainers must retain all completed assessment material for quality assurance audits.

Quality Assurance

The Quality Assurance requirements of SiteRight Assured Course delivery can be found within the SiteRight Assured Course Quality Manual, available on the NOCN website.





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