

Adopted and
Specified by the
Royal Corps of Signals



Customer Focused ▶▶
Quality Driven ▶▶▶▶

Network Infrastructure Resettlement Brochure

Shaping the Future of the Network Infrastructure Sector



cnet-training.com/resettlement



The Global Leader in Technical Education for the Digital Infrastructure Industry

Since 1996, CNet Training has educated thousands of Service Leavers, providing them with the skills, hands-on experience and sought after qualifications to enter the lucrative network cable industry.

Today, CNet Training is the only industry dedicated education provider in the world to provide both internationally recognised qualifications and official certification for their programs.

CNet Training is proud to be the originators of The Global Digital Infrastructure Education Framework which forms the benchmark education for the industry across the world. It maps professional education programs to actual career routes available throughout the industry allowing learners to enhance their skills, knowledge, industry recognised qualifications and official certifications as they progress. And, of course, many programs are eligible for ELC funding allowing Service Leavers extra help to continue to progress their careers.

Every CNet Training program has been carefully designed to blend technical knowledge with essential hands-on skills that are needed for the industry. We have an on-going schedule to regularly review the content of each program to ensure it reflects the very latest changes in technology, in addition to preparing students for possible new and emerging industry trends that are just around the corner. Plus, working alongside major companies in the industry CNet Training ensures each program content continues to meet the needs of the industry today and reflects the emerging future trends.

CNet Training believe that it's the combination of program design, alongside the quality of expert instructors, many of whom are ex-Forces themselves, that form the secret of their on-going success.

For full information about CNet visit www.cnet-training.com



What is the CNCI®?

The Certified Network Cable Installer (CNCI®) program is shaping the future of the network infrastructure industry as the industry standard certification for those working within the network cabling sector. It's an industry approved certification.

The certification, has been fully embraced and approved by these major industry organisations, who are specifying it as the new 'must-have' official certification for their teams. It is also now specified by The Royal Signals for their technicians. Having this accolade from the sector itself confirms that this welcomed change is set to make a huge difference now and in the future (see the endorser list and comments in this brochure).

The certification is the Certified Network Cable Installer (CNCI®). It is dedicated to providing cable installers with everything they need to confidently and accurately prepare, install, test and certify copper and fibre cabling systems, specifically for those wishing to demonstrate the highest levels of knowledge, skills and expertise in network infrastructure.

Blending a perfect mix of theoretical study and practical exercises the CNCI® certifies individuals' ability to work to the correct cabling standards and follow the recommended codes of practice when undertaking cable installation projects.





Shaping the Future of the Network Infrastructure Industry

The Certified Network Cable Installer (CNCI®) is the perfect program to start your new career within the network cable installation industry.

CNCI® is a 20 day program consisting of:

- ▶ 5 Days of Copper Cable Installation
- ▶ 5 Days of Fibre Installation
- ▶ 10 Days Work Placement with an installation company

Successful completion of the CNCI® provides:

- ▶ BTEC Level 3 Award (Copper)
- ▶ BTEC Level 3 Award (Fibre)
- ▶ Official CNCI® Certification
- ▶ A post nominal title i.e. Martin Smith CNCI
- ▶ Fluke CCTT® Certification
- ▶ Eligibility for an Electrotechnical Certification Scheme (ECS) Datacomms Specialist card - required to allow you to carry out work on-site

Work Placement

The CNCI® program also includes a 10 Day Work Placement with a cable installation company. We will arrange the placement for you so you can gain valuable on-the-job hands-on experience. Plus, some cable installation companies are currently recruiting so we will urge you to treat the placement as a two-week job interview to really demonstrate your skills, ability and enthusiasm to maximise the chances of being offered employment with the company. maximise the chances of being offered employment with the company.

Experienced Service Leavers

For the more experienced Service Leavers, CNet has many other Network Infrastructure and Data Centre education programs that can be funded with ELCs, please see The Global Digital Infrastructure Education Framework that shows career progression routes with programs that are in-line with industry requirements.



CNCI® Benefits at a Glance

The ten day CNCI® certification proves the quality of an individual's copper and fibre cable installation workmanship and demonstrates the highest level of knowledge, skills and expertise.

Successful individuals:

- ▶ Have knowledge of, and are therefore qualified to work to, the correct standards and best practices
- ▶ Be eligibility for an Electrotechnical Certification Scheme (ECS) Datacomms Specialist card - required to allow you to carry out work on-site
- ▶ Provides certification for, or counts towards, many of the manufacturers own certification programs
- ▶ Know they are leaders in network cabling and are therefore contributing to the changing face of the industry



Certified Network Cable Installer - Resettlement

2 x BTEC Level 3 Awards
(Copper & Fibre)

=

10 DAY
WORK PLACEMENT

+

5 DAYS
CNCI FIBRE OPTIC CABLING
BTEC Level 3 Award (Fibre)

+

5 DAYS
CNCI COPPER CABLING
BTEC Level 3 Award (Copper)

Shaping the future of the Network Infrastructure Sector

Certified Network Cable Installer (CNCI®) Resettlement Program

with a 10 Day Work Placement

The Certified Network Cable Installer (CNCI®) program is shaping the future of the network infrastructure industry as the first official industry standard certification for those working within the network cabling sector. It's the must-have certification for all those working within the sector and is endorsed by the sector's major organisations.

The CNCI® certification is perfect for Service Leavers, combining the **ten day program** with a further **ten day work placement** with one of the major installation companies with the potential for employment.

Program Overview

The Certified Network Cable Installer (CNCI®) resettlement program is for Service Leavers wishing to demonstrate the highest levels of knowledge, skills, expertise and competency in network cabling infrastructures and offers a real opportunity to gain employment.

It's a comprehensive program that blends a perfect mix of theoretical study and practical installation, testing and survey exercises providing the right level of knowledge and skills for both copper and fibre cable installation practices.

Official CNCI® certification also provides two industry recognised Level 3 BTEC qualifications and proves that an individual is qualified to undertake cable installation projects to the highest possible calibre whilst working to the current industry standards including BS EN, TIA and ISO, and following the latest codes of best practice. During the program students will also have access to current standards for reference purposes.

The program is endorsed by major installation companies, manufacturers, industry associations and consultants knowing that it provides the right level of technical knowledge, competence and confidence to the industry whilst demonstrating capability and credibility. Plus, CNCI® certification is now being specified as a must-have certification on tender documentation, ensuring installation teams are certified before being able to work on major new build projects.

This program is a must for Service Leavers who are looking to enter a potentially rewarding career with recognised qualifications and certification. There is also further opportunity to progress as CNet Training are the originators of The Global Digital Infrastructure Education Framework that provides further education programs that map to actual career progression within the industry.

CNCI® Benefits for Individuals

- ▶ Become one of the elite certified network cable installers in the country
- ▶ Demonstrate the highest levels of knowledge, skills and expertise in network infrastructure installation
- ▶ Plan individual tasks and materials required accurately and with confidence
- ▶ Install copper and fibre network cable infrastructure projects on time and within budget, maximising profit potential.

CNCI® Benefits for Business

- ▶ Confidence that employees have a full and rounded knowledge in network infrastructure installation, improving competency and productivity
- ▶ Reduced time and material wastage - employees can carry out tasks in an accurate and timely manner
- ▶ Delivering infrastructure installation projects to the highest quality standards resulting in increased client satisfaction and potential repeat business
- ▶ Meet contractual requirements reducing sign off and project hand over times

Resettlement Program Certified Network Cable Installer (CNCI®)

20 DAY PROGRAM

Split into:

- ▶ 5 Days Copper Cabling
- ▶ 5 Days Fibre Optic Cabling
- ▶ 10 Day Work Placement

Combined: 50% Theory 50% Practical

The CNCI® Program consists of 408 pages of rich technical content.

Service Leaver Profile

The CNCI® program is perfect for Service Leavers wishing to acquire the very latest skills and knowledge to enable them to complete both copper and fibre cable installation projects to the highest standards.

Pre-Requisites

No previous experience is required to attend this program.

Program Objectives

Successful Service Leavers will have the knowledge and skills to confidently install, test and certify a complete copper and fibre cable installation. This forms part of the entry level requirement into the Global Digital Infrastructure Education Framework which allows individuals to progress their knowledge, education and skills in-line with their career within these fast moving industries. See www.cnet-training.com to view the Global Digital Infrastructure Education Framework.

Qualification

- ▶ BTEC Level 3 Award in Certified Network Cable Installer (Copper)
- ▶ BTEC Level 3 Award in Certified Network Cable Installer (Optical Fibre)

Certification

- ▶ Official Certified Network Cable Installer (CNCI®) certification
- ▶ Use of the CNCI post nominal title
- ▶ Use of the CNCI® logo
- ▶ Fluke CCTT® certification

Certifications are a commitment to life-long learning and offer the perfect portal to ensure knowledge, skills and certification remain current and up-to-date. Each certification gained requires re-certifying every three years via a simple online system.

Additional Awards

- ▶ Eligibility for an ECS (Electrotechnical Certification Scheme) Datacomms card
- ▶ Continual Professional Development (CPDs)
- ▶ 10 IEEE Continual Education Units (CEUs)

Certified Network Cable Installer (CNCI®) Topics

CNCI® Copper Cabling

Introduction to Structured Cabling

- ▶ Cable media types
- ▶ Network topologies
- ▶ Categories

LAN Hardware

- ▶ PC's, switches, routers

Installing Structured Cabling

- ▶ National and International standards
- ▶ Interpreting drawings
- ▶ Risk evaluation
- ▶ Working in containment routes
- ▶ Cable installation, cable termination
- ▶ Tool and equipment selection

Network Overview

- ▶ What is a network?
- ▶ Characteristics of a network
- ▶ Resource sharing

Signal Theory

- ▶ Electrical principals
- ▶ DC current principals
- ▶ Analogue v. digital

Health & Safety

- ▶ Legislation
- ▶ Workplace risk
- ▶ Electrical safety
- ▶ Working at heights
- ▶ Working in confined spaces

Standards

- ▶ Why standards?
- ▶ Standards bodies BSI, ISO, CENELEC, TIA/EIA
- ▶ Categories and classes

Fire Safety

- ▶ Why fire stop?
- ▶ Types of fire stopping
- ▶ Three pillars of fire stopping
- ▶ Construction Product Regulation (CPR)

Documentation & Labelling

- ▶ Floor plans
- ▶ Naming conventions
- ▶ Symbols
- ▶ Records

Testing & Commissioning

- ▶ Continuity testing
- ▶ Certification/acceptance testing
- ▶ Level IV testing
- ▶ Saving of results to database
- ▶ O&M manuals

Practical

- ▶ Patch cord manufacture
- ▶ Cable installation
- ▶ Termination techniques UTP/STP
- ▶ Patch panel/outlet termination, Cat 5e/Cat6

Fluke CCTT (Copper)

- ▶ Copper certification (DSX)
- ▶ Set up DSX
- ▶ Test using DSX
- ▶ Troubleshoot
- ▶ Test standards/limits
- ▶ DSX Diagnostics
- ▶ HDTDX and HDTDR

CNCI® Fibre Cabling

Safely Working with Fibre/General Safety

- ▶ LED, VCSEL, laser safety
- ▶ Fibre preparation hazards, disposal of sharps
- ▶ Hazardous substances
- ▶ OSP safety, pits, gas detection
- ▶ General safety

Network Overview

- ▶ History of fibre
- ▶ Advantages
- ▶ What is a network?
- ▶ Benefits of a network
- ▶ Topologies
- ▶ Why a network?

Hardware

- ▶ Cable construction
- ▶ LED, VCSEL, laser sources
- ▶ Switches, routers, media converters

Theory of Light Transmission

- ▶ Optical windows
- ▶ Electromagnetic spectrum
- ▶ Transmission
- ▶ Media choice

Cable

- ▶ Construction
- ▶ Choice of cable
- ▶ Installation practices
- ▶ Patchcords

Enclosures

- ▶ ODF
- ▶ 19" Splice tray
- ▶ Slack fibre management, protection, patch field

Standards

- ▶ Standards bodies BSI, ISO, CENELEC, TIA/EIA
- ▶ Classifications
- ▶ Application distances

Connectors

- ▶ Connector types
- ▶ Functionality
- ▶ Density (SFF)

Outside Plant (OSP)

- ▶ Fibre backbone in the LAN
- ▶ Hardware
- ▶ Media choice

Fibre Splicing

- ▶ Safety
- ▶ Fusion slicer set up and operation
- ▶ Singlemode programs
- ▶ Multimode programs
- ▶ Slicing in patch panels

Fibre Termination

- ▶ Safety
- ▶ Pigtail manufacture
- ▶ Techniques, cold cure, mechanical splice, fusion splice
- ▶ End-face inspection techniques

Fluke CCTT (Fibre)

- ▶ Tier 1 fibre certification (CertiFibre® Pro)
- ▶ Tier 2 fibre certification (OptiFibre® Pro)
- ▶ Encircled Flux (EF)
- ▶ End face inspection
- ▶ Set a reference
- ▶ OTDR event types
- ▶ OptiFibre® Pro link testing

There are a number of individual practical activities and assignments leading to a group installation project.

“ This is a really good program. The content is comprehensive and relevant. The tutor is capable and knowledgeable with ample onsite experience to offer useful analogies and understands the issues faced by installers in the field. ”

PROJECT MANAGER

“ The CNCI® program is comprehensive and at the depth that we were looking for, it also provides official certification and two level 3 qualifications as evidence of learning. ”

**COURSE CO-ORDINATOR
THE ROYAL CORPS OF SIGNALS**

“ The CNCI® program provides the perfect opportunity for us to get behind a recognised certification that provides the right level of technical knowledge and gives reassurance to customers. The feedback we have had from our staff that have attended the program has been excellent, even those with lots of experience have found the program challenging and rewarding. ”

OPERATIONS DIRECTOR



CNCI® Endorsers

The following organisations fully support and endorse the CNCI® certification:



CNCI® Endorser Comments

"NG Bailey IT Services are very excited about our partnership with CNet Training. The CNCI® training program will support our business direction and ultimately further enhance our "best in class" service to our clients in the future."

Managing Director, NG Bailey's IT Services Division



"Our Installation Technicians are of the highest calibre and every program we choose must deliver the highest quality knowledge and skills. We have incorporated the Certified Network Cable Installer program as the content is comprehensive and at the depth that we were looking for, it also provides official certification and two level 3 qualifications as evidence of learning. Our confidence was boosted that we were making the right decision as it's clear that the CNCI® is already adopted and endorsed by the UK's network infrastructure industry and is the only standardised certification for the industry. As highly trained specialists we must ensure the military are able to provide the best capability, on time, to standard anywhere in the world and in any conditions."

Course Co-ordinator, The Royal School of Signals

"I am pleased to confirm that Maxxam Cabling Solutions endorses the CNCI® certification. Furthermore, I can confirm that we will accept companies who have a minimum of two engineers that have successfully completed the CNCI® program on to the Maxxam Installer Partner program without the need for them to complete any further formal training."

Technical Manager, Maxxam Cabling Solutions



"At Computacenter we are delighted that the CNCI® training program will bring a defined and appropriate level of competence, and therefore confidence, that is much needed. Whilst we feel we offer the highest levels of service today, the CNet Training program brings an industry recognised certification that will demonstrate both capability and credibility and we welcome it."

Head of Physical Infrastructure, Computacenter

"LMG and CNet Training began a collaboration using the CNCI® (Certified Network Cable Installer) program some time ago to bring infrastructure working practices into the business and test competency of engineering standards in a practical setting. Now our engineers are fully prepared for any future solution when on site and have the confidence and knowledge so critical in this market. In our experience the synergy between sound business ethics, good training practices and adaptive partnership has enabled strong, sustainable and ethical business development."

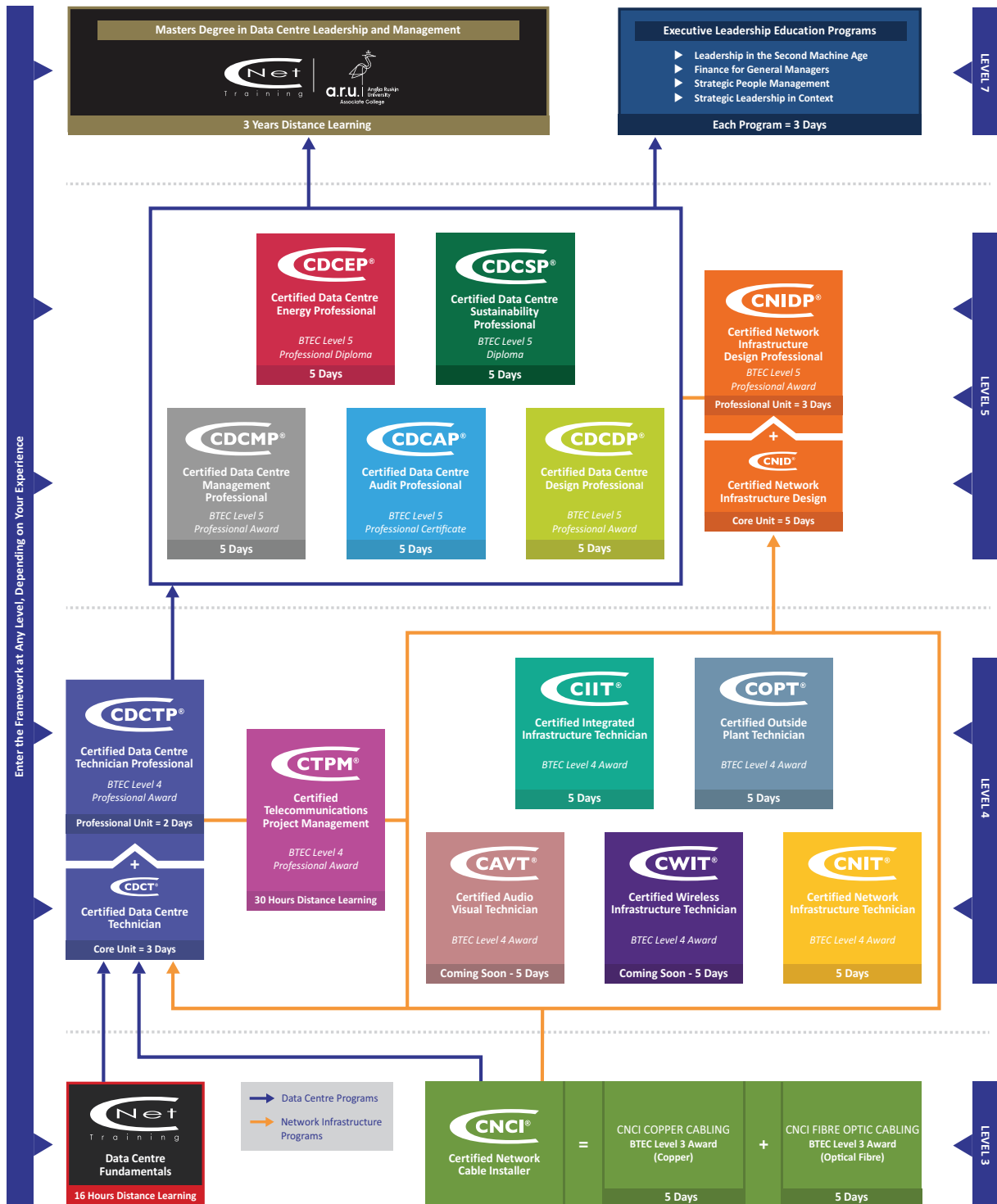
Managing Director of LMG



The Global Digital Infrastructure Education Framework

CNet Training's highly acclaimed Education Framework offers industry professionals an opportunity to map education programs to meet their requirements. It is recognised and respected all over the world and provides designations that have become key skills reference points that allow those holding them to clearly demonstrate their ability and experience.

Each program has been designed to address the skills and knowledge requirements of those working in different areas of these vibrant and fast moving sectors. Whilst the programs flow perfectly from one to another they are of equal value as stand alone programs, plus you can enter the framework at any level depending on your level of experience.



Why Choose CNet Training?

Why Choose CNet?

The first thing you notice when contacting us is that there is no hard sell, just friendly and informed one-to-one advice. Our proven experience in providing resettlement training means we understand the pressures inherent in such a life-changing move. Our team is dedicated to providing one-to-one support, working to meet individual needs and aspirations in knowledge, skills and career goals.

The Global Leader in Technical Education for the Digital Infrastructure Industry

CNet Training are the only dedicated industry education provider in the world to award both industry recognised qualifications and official certifications.

Experienced Resettlement Education Provider

CNet Training started in 1996 by delivering Resettlement training programs, we know how it works and understand what Service Leavers are going through at this important stage of their careers and life.

Guaranteed Work Placement

The Work Placement is a crucial element to our CNCI®, entry level program. Service Leavers are placed with some of the best and most respected companies in the cable installation sector. The added benefit is that often these organisations are looking to employ, so that Work Placement is effectively a 2-week job interview which could result in an offer of employment.

Unrivalled Qualification & Certifications

The only dedicated industry education provider in the world to award both industry recognised qualifications and official certifications. Approved to provide qualifications by Pearson, the world's largest education company.

Trusted & Chosen by Multinational Companies Across the Globe

The chosen education and training provider by the world's most influential organisations.



Experienced

The largest and longest serving education provider dedicated to the industry, delivering quality training since 1996. Trained over 60,000 individuals, in 35 countries and to 70 different nationalities.

Quality Driven

We hold the ISO 9001:2008 accreditation for quality commitment. Every CNet Instructor is a full-time employee at the company, helping to ensure we maintain consistency and our high quality standards. Each Instructor undertakes a rigorous Train-the-Trainer Process for each program they deliver.



Why Choose CNet Training?

The Global Leader in Technical Education for the Digital Infrastructure Industry

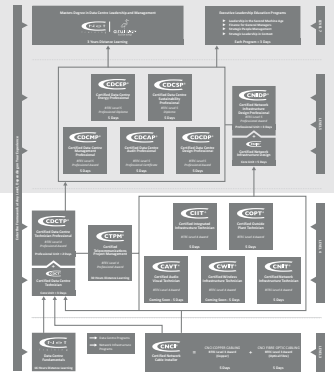


The **only** dedicated industry education provider in the world to award both industry recognised **qualifications** and **certifications**



The **chosen education provider** by the world's most influential organisations

Originators of The Global Digital Infrastructure Education Framework, followed by multinational organisations across the world



Multiple global industry **awards WON!**

CNet offer up to **12 months interest free payment options** for those in the UK.



Experienced Resettlement Education Provider - the largest and longest serving industry dedicated education provider, delivering **quality education since 1996**

Many of our programs are **eligible for ELCs**



ISO 9001:2008 accredited for quality commitment

CNet is **100% customer focused** and **quality driven**

All CNet Instructors are employed by the company ensuring we maintain our high quality standards



Each Instructor undertakes a rigorous **Train-the-Trainer Process** for each program they deliver



Approved to provide qualifications by **Pearson**, the world's largest education company

Educated over **65,000 individuals**, in **35 countries** and to **121 different nationalities**



Benefit from **strong alliances** with many of the **world's leading organisations** such as AFCOM, TIA, DCA, The Green Grid, Pearson, Department of Energy - DoE (USA)

Some of CNet's Global Clients



Next Steps...

Just give Emily a call to talk through your requirements and she will guide you every step of the way.

We will require a completed Program Application Form and a Work Placement Form, Emily can provide these for you.

Emily Jessup

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Customer Focused ▶▶
Quality Driven ▶▶▶▶

Network Infrastructure Resettlement Brochure

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