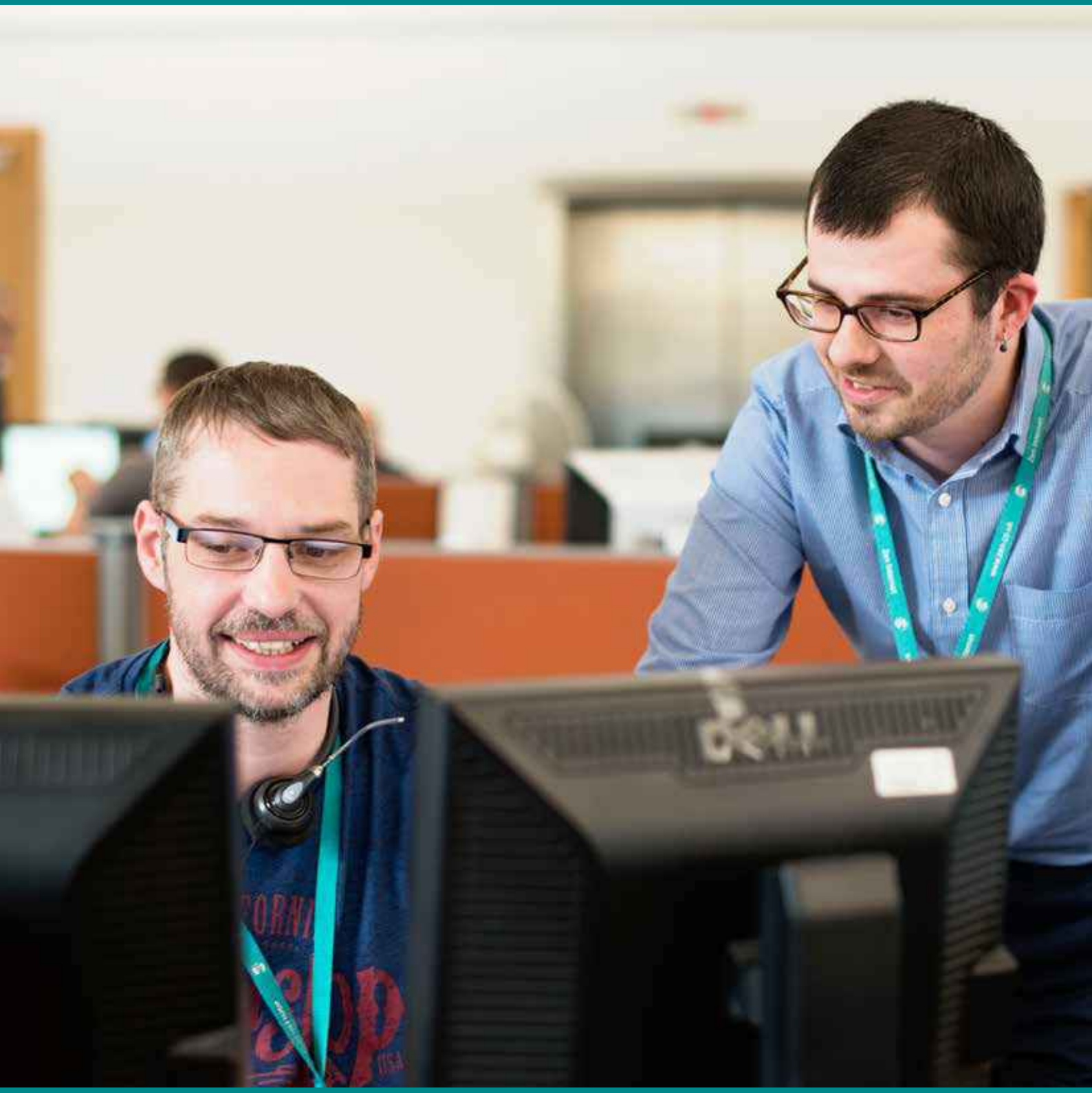


Your Fibre Ethernet Provisioning guide

Introduction

This document provides everything you need to know about the provisioning of your Fibre Ethernet order, from placement until completion.

What we will cover:

Pre-survey Checks	What they are and how they improve the efficiency of your order progression.
Ethernet Categories	What they mean for your order.
Quick Wins	What is a quick win and what it means for your order.
Key Milestones	A breakdown from day one to order completion.
Potential Delays	What might hold up an order.
Engineering Activities	What work may be needed following a survey.
FAQ's	Answers to questions you may have about the provision of your circuit.

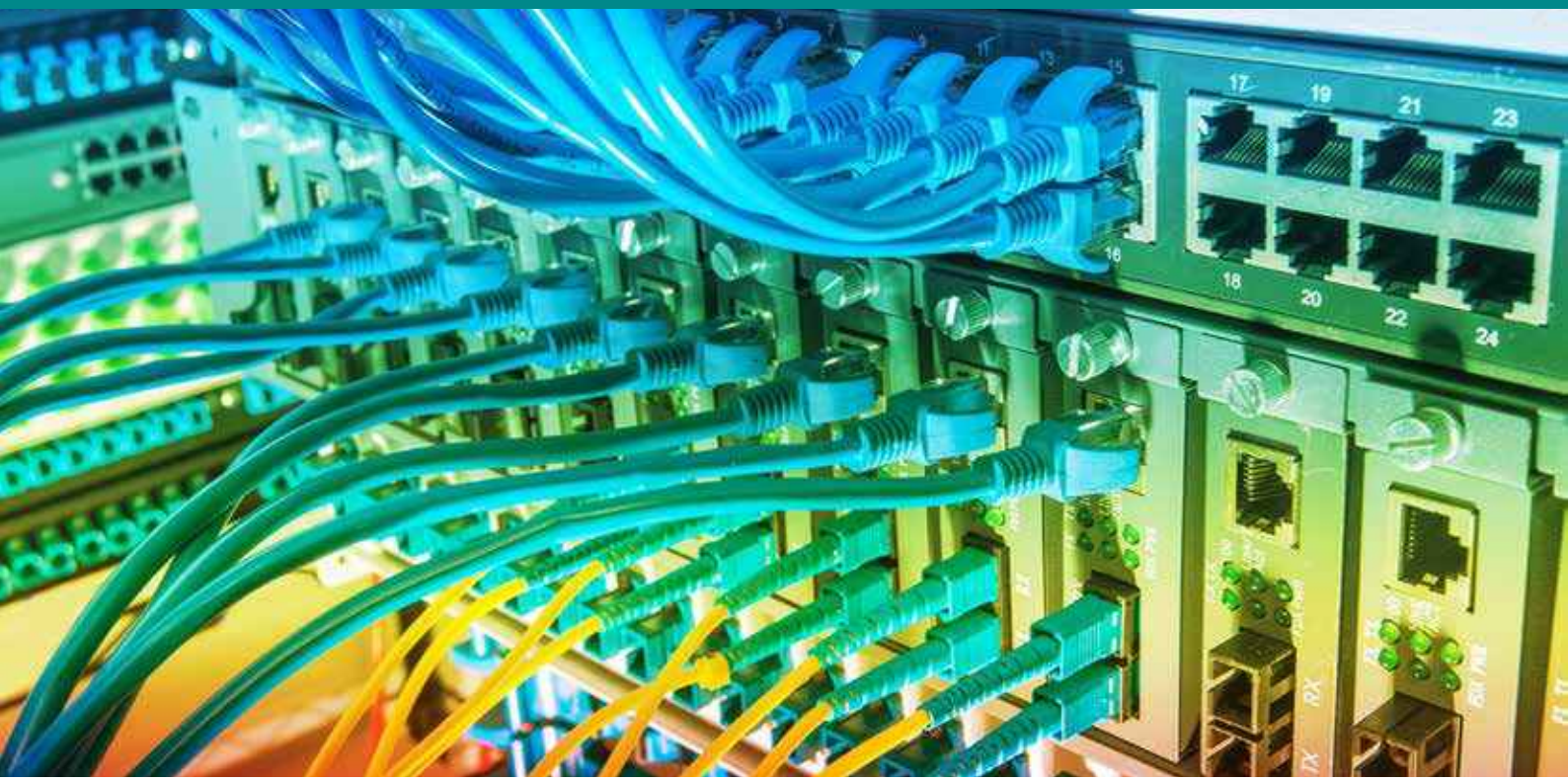
Pre-Survey Checks

Prior to placing an order with our suppliers we need to ensure that the installation premises is ready.

If the site isn't ready when engineers arrive it may delay your order, though we will do everything in our power to avoid this. Help avoid delays by ensuring that:

- ✓ The building/site will be accessible for survey.
- ✓ If the site requires an induction, you let us know when we contact you to arrange an engineer visit.
- ✓ If the premises were built before 01/01/2000, you have the asbestos register certificate available for the engineer upon arrival.
- ✓ The onsite contact is able to provide access to all necessary areas for the survey, including risers and intake areas.
- ✓ The on-site contact has the authority to verbally agree the internal cable route.
- ✓ If the building is multi-tenanted you can provide access to all areas.
- ✓ If there are any site specific access or security restrictions you make us aware as soon as possible.
- ✓ The termination is ready for installation.
- ✓ There is a mains power socket available within three metres of the circuit termination point.

Please be aware that if the survey has to be terminated for one of these reasons an abortive visit fee may be charged.



Fibre Ethernet Categories

Your order will be categorised based on complexity to deliver the circuit. Here is a breakdown of these categories:

1

Category 1 Infrastructure build already to site and existing duct. Fibre may already be present or there may be a requirement for new blown fibre into the building.

Cat 1.1 (No site survey required) Quick Win The provision of this circuit will progress straight through to the internal install.

Cat 1.2 (Site survey is required) Our suppliers are confident that existing infrastructure is present at site but feel a site visit is required to confirm this and ensure their records are fully up to date.

2

Category 2 Cabling work and new blown fibre are required in the underground ducts.

Cat 2.1 Infrastructure records indicate that existing ducting can be used.

Cat 2.2 New ducting is required to site. This could be because there is no existing infrastructure served to the premises or replacement duct work is needed.

3

Category 3 New core infrastructure build required (Spine cable) due to supplier capacity restraints.

4

Category 4 New core connectivity required at the exchange.

Cat 4.1 If exchange tie cable is at capacity, an additional tie cable is needed.

Cat 4.2 Exchange network upgrade is required.

Quick Win

In many cases our supplier's physical infrastructure is already set up to serve your premises and no building work is required to blow and terminate the fibre at a site. If initial planning records indicate that both ends of the circuit fall into this category then a visual site survey is not required and the order will progress straight to the internal fibre and Fit & Test of the circuit. This is called a quick win.

We can't guarantee that quick wins will always be successful, but in our experience they usually are.

On rare occasions, engineers arrive onsite to complete installation work and encounter unexpected issues not shown by planning records, such as:

- ✓ Inability to access the lead-in at the site – often this is because it has been concreted over or obstructed.
- ✓ Site has undergone refurbishment or has been redeveloped since fibre was originally installed
- ✓ Site readiness – comms/server room may not yet have the necessary racks installed or power.
- ✓ Faulty infrastructure e.g. blocked duct /broken cable/faulty fibre.
- ✓ Fibre already in use – disparity with fibre records.
- ✓ SSRAMS:
  Site Specific Risk Assessment And Method Statement required.

In rare cases, the order might need to be rolled back for a re-plan and a site survey may then be required.

If so, we will do everything we can to pro-actively manage your order through these additional planning stages.

Key Milestones

PRE-ORDER	DAY 1-2	DAY 3-15	DAY 16-30	DAY 31-55	DAY 56-65	DAY 65-67
Order form sent to capture customer requirements	Provisioning Co-ordinator assigned	Carrier order acknowledgement	Site survey results received and remaining planning activities completed	Engineers carry out all external work and civils if required	Receive handover from supplier	Circuit handover details sent to Managed Networks
On receipt, pre-validation activities take place	Order validation and network capacity checks	Desktop planning determines whether a site survey is required	Job packs issued to engineers for external / internal fibre work	Internal fibre and cabling work arranged	Managed Networks configure router and test circuit	Contact to the customer to arrange install date / time
Credit checks take place (where applicable); order is prepared	Order submitted to carrier	Site survey booked with customer (or internal fibre if quick win)	Customer delivery date confirmed by carrier	Fit & Test at customer site and exchange with final remote commissioning	Official handover to customer	Book engineer for requested date

Please note the delivery lead time can vary dependent on the ethernet category.
All timescales are subject to planning, surveys & external works (if applicable).
We will provide frequent updates throughout your provisioning journey.

Potential Delays

At Computercentric we have the experience and resources to make sure your order proceeds as smoothly as possible.

We work diligently on your behalf with all relevant third parties, and promise to regularly contact you with information on the progress of your order.

Occasionally, orders are subject to unavoidable delays, which we detail below. Rest assured that, if an order is delayed, we work proactively to get it back on track.

Wayleave

A wayleave is the consent in writing that allows our supplier to carry out work on privately-owned land. It's a written legal agreement between the supplier and the land/property owner that grants access to install, maintain or repair equipment. This requirement is bound by UK Law before starting any physical work.

Excess Construction Charges (ECC's)

These may be incurred for your wayleave (if required) and for the provision of physical work. They are identified after the site survey and presented to us in the planning results.

Noticing

Our supplier may need to work with local authorities/ councils to carry out any physical work as it may involve a temporary road closure or parking bay suspension. This is referred to as 'noticing' because they require permission from the local authority before proceeding. The time frame for these approvals varies regionally and can be up to three months.

Requirement for supplier /core infrastructure build

Spine cable / core cable.

Driver circuit

When another circuit is the first one to be provisioned within the same local area. Any core dependencies will be carried out on the driver circuit along with any ECCs. Our circuit is reliant on ECC acceptance and all external work being completed before your order can progress.

New customer lead-in requirement

If existing lead-in at the customer site is blocked or at full capacity, a new customer lead-in will be required.

Force Majeure

Any circumstances beyond our control such as extreme weather conditions, power failures and natural disasters.

Permission to dig/work (PTD/W)

This is a document that needs to be signed by a private land owner in the event that an official wayleave document is not required.

Engineer Activity Descriptions

Test Rod & Tube (TRT)

If an existing duct is planned to be used, then engineers will use a rod to check that there are no blockages or damages to the duct.

There may be a need to repair or replace the duct if so wayleave or traffic management may be required which could significantly delay the order.

Internal cabling*

Required in the installation property. To provide the cabling internally, wayleave may be required.

Internal concrete*

Required in the installation property. A hole will be drilled through a concrete wall to feed the through the cabling.

Civils

A requirement for new ducts, joint boxes or to repair underground infrastructure.

Tubing

Suppliers install new tubing where it has been highlighted as required.

Cabling

Once blown fibre/TRT/tubing is completed, suppliers can then carry out the cabling as required.

If any damages are found and replacements are required then Traffic Management (TM) may be needed.

Internal non concrete*

Required in the installation property to drill a hole through a non-concrete wall to feed the cabling through.

Splicing

Where fibre cables need to be fused together.

*All internal works are carried out by contractors

Engineer Activity Descriptions

Street Works

Dependent on the location, the Local Authority can require up to three months notice. Utility works will always be prioritised so confirmed dates for orders can on rare occasions be pushed back.

Out of hours works may be required. On some narrow roads a full road closure might be needed: this can cause delays.

Duct Footway/Carriageway

If ducting is required on a path or track for pedestrians or under a road, Traffic Management (TM) may be needed.

Fit & Test (F&T)

Engineers attend site and the serving exchange to carry out a full end-to-end test of the circuit. Engineers install the Network Terminating Equipment (NTE, usually referred to as ADVA) at the customer site and terminate the tail end of the fibre in to this equipment. The Cisco router will also terminate in to the ADVA.

Pole Installation

A new telegraph pole may be needed to feed overhead cables. This is uncommon and usually only required when there are issues providing the fibre underground.

Blown Fibre

Fibre is blown through a ducting pipe from the nearest source of fibre through the customer site lead-in.

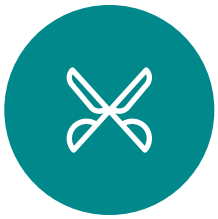
Internal Fibre Jointing

Engineers complete the internal fibre work by pulling the fibre into the premises to the termination point.

Ethernet Single Visit (ESV)

Engineers install the fibre, NTE (ADVA) and perform the Fit & Test in one single visit.

Ethernet Abbreviations



KCI	Keep Customer Informed
KCI1	Order Acknowledged
SS	Site Survey
KCI2	Site Survey Results
ECCS	Excess Construction Charges
KCI3	Confirms CDD
CDD	Customer Delivery Date (Never guaranteed)
ECD	Estimated Completion Date (Used for individual tasks)
TRT	Test Rod & Tube
PTW	Permission To Work
PTD	Permission To Dig
TM	Traffic Management
LA	Local Authority
IFP	Internal Fibre Provision

F&T	Fit & Test
ADVA	Providers of NTE
SECTION 58	Request to dig up a road/path that has recently been disturbed can cause lengthy delays as they may not be able to disturb the road again for a set time e.g. 2 years
A55	Design plan for work to be carried out to remove an obstruction or issue. Primarily for blockage clearance or traffic management
SSRAMS	Site Specific, Risk Assessment And Method Statement
OOH	Out Of Hours Work
HA	Highways Authority
DAN TEAM	(Dig Auxiliary Network Control) will use the A55 document to produce an estimate for the contractor to complete the work
PTO	Precision Test Officer - Tests fibre tails to ensure no breaks/faults
NTE	Network Terminating Equipment (usually referred to as an ADVA)

FAQs

I've just placed my order, what happens now?

We will validate the order to see if we have all the required information to submit to our supplier, who will then carry out further validation. Once confirmed the order will then go through to the network planning team who will determinate whether a site survey is required. This process will take approx. 5-10 working days.

Which suppliers do you work with?

Computercentric work with all the key players in the market, primarily BT, Virgin Media, Zen Internet, Vodafone and TalkTalk. The supplier selected to provide your line will be the best choice based on your location. Different suppliers have different levels of 'presence' in different areas, so pricing and availability of ethernet services vary widely depending on location.

Who actually installs the line into our premises?

Regardless of the supplier selected for your line, it's usually Openreach or one of their partner companies that does the donkey work. Once the fibre is in place, it's a Computercentric engineer who will connect everything up for you.

When will I get my survey results?

Following a successful survey the results will be reviewed by the planning team and sent through to us within 5-10 days from the survey date. We will share them with you as soon as they are received.

When will the circuit be live?

Our supplier won't normally commit to an overall delivery date until all the dependent tasks are complete due to potential delays with duct issues, third party permissions and/or traffic management. Once they are happy with progression they will then be in a position to provide the estimated delivery date and as soon as we receive it we will share it with you.

We already have a circuit in the building, why do you have to do external works?

During the site survey the engineer may find that the ducting/tubing/cabling is already used up by another circuit in the area, anywhere from the exchange to the premises that share the same route point. This may mean external work is required.

Why is the Traffic Management date booked in so far in advance?

Our supplier will need to work with local authorities/councils to carry out any physical work as it may involve road closure or parking bay suspension. This is referred to as 'noticing' because they require permission from the local authority before proceeding. The time frame for these approvals varies regionally and it can be up to three months before any work can commence.

We've just received an update of a new delay. Why wasn't the issue found during the survey?

During a site survey the engineers will generally walk part/all of the distance from the exchange to the premises to ascertain what route this will take. Engineers base reports on infrastructure records and above ground site surveys. Unfortunately, damaged or blocked ducting or tubing can only be identified when work has started. This can occasionally lead to unforeseen delays.

FAQs

An engineer has installed the fibre. Is the circuit now live?

Not quite:

1. If the engineer installed the Network Terminating Equipment (NTE) during the visit the order will then be passed to the Fit & Test team who will carry out commissioning testing remotely from the exchange. Once testing has been completed they will then hand the circuit over to Computercentric.

2. If the engineer did not install the NTE (not a requirement on the first visit) this will require a further visit to the premises for a Fit & Test appointment. They will carry out the commissioning tests and handover the circuit to Computercentric.

When will we receive our hardware?

We aim to ship the hardware once we receive the appointment for the fibre install.
It doesn't need to be on-site before handover.

When does the billing commence?

Once we hand the circuit over to you the billing will commence as the circuit is now live and usable.

Why does it take so long?

We get this a lot. It can be frustrating, particularly if one of the reasons behind the order is to resolve slow broadband issues. Remember that normal broadband, and even super-fast fibre broadband, despite the name, is primarily delivered over existing copper cabling that has been there for years, and is everywhere. That's why normal broadband can be provisioned so quickly. Your dedicated ethernet service is a direct connection over a solid fibre optic cable that runs direct from your premises, back to the nearest exchange.

To get that cable in place, involves a lot of planning, liaison and agreement between a host of companies, including utility companies, local councils, civil engineering contractors, plus the owners of various ducts or access points along the cable route, as well as your landlord and any other interested parties. Once you've seen behind the scenes as we have, it's a miracle that the suppliers manage to get this all done so quickly!