

openreach

ISIS Practice  
For Openreach and Contract Partners

AEI/ACC/S011

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# ***FTTP Accreditation for Surveyors***

## ***About this document ...***

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### **Content approval**

This is the Issue 17 of this document.

The information contained in this document was approved on 17-Apr-2023  
by Vanessa Hilton, Accreditation professional

## Version History

Version No.	Date	Author	Comments
Issue 17	17-Apr-2023	Quality Standards & Accreditation	Questionnaire re written and verified. New MDU Policy and DIG Policy included. Author change
Issue 16	12-Sep-2022	Quality Standards & Accreditation	Method section updated
Issue 15	25-Jul-2022	Quality Standards & Accreditation	Question 61 re-written, format to new template. Table of content updated
Issue 14	21-Jun-2022	Quality Standards & Accreditation	Q44 and Q63 amended
Issue 13	17-Jun-2022	Quality Standards & Accreditation	Document moved into new template. Questionnaire reviewed and re written. Questionnaire time extended to 120min. New documents added to the reference section
Issue 12	23-Jun-2021	Quality standards & Accreditation Network Engineering	Document updated in questionnaire to reflect planning policy 777 changes. Openreach WBT course code added.
Issue 11	07-Dec-2020	Quality standards & Accreditation Network Engineering	Method section updated to include new Demo PON request process, for Orion
Issue 10	18-Nov-2020	Quality standards & Accreditation Network Engineering	References section reviewed and amended
Issue 9	03-Nov-2020	Quality standards & Accreditation Network Engineering	Document review. Prerequisites added as bullet points. Safety section updated to new format. Method changed for Orion usage. Questionnaire rebuilt with questions added and removed. Modular Guidance redesigned into new format and updated. Scoring changed
Issue 8	04-Mar-2020	Quality standards & Accreditation Network Engineering	Correction made to Q26, Q32 and Q35 changed
Issue 7	18-Feb-2020	Quality standards & Accreditation Network Engineering	Correction made to Q13
Issue 6	14-Jan-2020	Quality standards & Accreditation Network Engineering	Document review. Links to external sources validated/updated where

			appropriate. Author/Approver/Publisher details amended. Change of author & approver details. New prerequisites, S13 & Orion usage, updated module guidance, references and questionnaire
Issue 5	16-Apr-2019	Quality standards & Accreditation Network Engineering	Document review. Links to external sources validated/updated where appropriate. Author/Approver/Publisher details amended. Section 4 amended with new instructions, module guidance and NASA amended accordingly.
Issue 4	20-Dec-2018	Quality standards & Accreditation Network Engineering	Document re-titled
Issue 3	21-Aug-2018	Quality standards & Accreditation Network Engineering	Document review. Links to external sources validated/updated where appropriate. Author/Approver/Publisher details amended. Questionnaire re-written to reflect current practices
Issue 2	13-Feb-2018	Quality standards & Accreditation Network Engineering	Document review. Links to external sources validated/updated where appropriate. Author/Approver/Publisher details amended. Change of approver. Questionnaire amended to reflect current practice, pass mark amended accordingly.
Issue 1	14-Feb-2017	Quality standards & Accreditation Network Engineering	Issued after review of draft OD by planning team,

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# 1 *Introduction*

This ISIS is reviewed and updated annually. Between reviews any changes are communicated using Access Engineering Communications (AEC).

Links to ISIS documents, accreditation modules and all reference material can be found in:

- [Technical Library](#), [Bookstore](#) or Policy & Build App for Openreach.
- CANDID for Contract Partners.

Answers for all modules are available via the Author of this document (see above).

In order to comply with the requirements of this accreditation module the Assessor must follow the procedure below:

- Allow the time shown for the Delegate to complete.
- Explain that reference documentation can be used.
- The criteria for **all** sections **must** be fulfilled in order to meet the requirements for this module.

# 2 *Scope*

The target audience for this accreditation is anyone working on the Openreach network including Contract Partners.

This module is an essential requirement for any Engineer / Partner carrying out Fibre to the Premises (FTTP) surveys. The overall content is covered in the following Description and Method sections, in more detail.

# 3 *Description*

This module consists of two parts, a questionnaire and a practical session.

**Prerequisites:** Delegate must have completed:

- AEI/ACC/S013 - Network Regulations Accreditation for Surveyors
- Suitable Orion training.

**Content:** This assessment will test the Delegate's knowledge and ability to complete FTTP surveys using current working practices, quality standards, planning policies and One Fibre Network (OFN) components.

**Duration: Questionnaire** 120 mins **Practical:** Open

## 4 *Measurement*

**Questionnaire:** The Delegate must achieve **80%** or greater to be successful. For Openreach people the questionnaire can be found on Learning Home as an online course using the code **ORCHK021**

**Practical:** Using the Module Guidance and ISIS documents for reference, the Assessor will check that the Delegate completes the tasks outlined in the Method section.

The Module Guidance outlines where coaching can be provided, highlighted by a Coaching Mark (C) next to each Assessment Pointer. No more than **30%** of the available Coaching Marks can be used.

**Assessor Note:** The exact score required to pass the questionnaire and the allowed number of Coaching Marks can be found in the Delegates Details section.

**Post Assessment:** You **must** enter the results onto the [Skills Passport](#) or Smart Awards for Contract Partners.

## 5 *Safety*

**Caution:** If the Delegate displays a disregard for, or lack of knowledge of safety, then STOP THE ASSESSMENT - re-assessment required - refer to –safety module for guidance

Using their mandatory holding of safety and relevant access equipment, the Delegate will demonstrate to the Assessor, the correct safety practices required to successfully complete this accreditation module. This may include a check of:

- Relevant safety modules on National Operative Passport Scheme (NOPS) card (Partners Only).
- Openreach Construction Design Management (CDM) 2015 Regulations Policy followed
- Relevant New Roads and Street Works Act (NRSWA) qualification.
- Personal Protective Equipment (PPE).
- Equipment checks.
- Gas testing procedure.
- Method of cover removal / replacement (Where applicable).
- Water testing
- Use of Telescopic Rods

## 6 *Method*

**Questionnaire:** Using reference documentation where required, the Delegate will complete the questionnaire. A maximum of **120** minutes is allowed for this exercise.

**Practical:** Using the correct tools, equipment and working practices, the delegate will complete an FTTP survey.

For Openreach employee's (Direct Labour) the accreditation must be completed using Orion.

For Contract Partners (Contractors) the accreditation should be completed using Orion where possible. If the Partner does not have access to Orion and its Training Environment, the accreditation will need to be done using a paper job pack, on a Demo PON.

The assessment will need to be completed under live working conditions, using one of the methods below.

- Onsite – During a new survey
- Onsite – During different parts of different surveys
- Onsite – Using an S11 Demo PON

**Survey Requirements:** The Delegate must survey an FTTP Passive Optical Network (PON) with a Total Homes Passed (THP) number greater than 30. The PON must incorporate both Overhead (OH) & Underground (UG) networks, Multiple Dwelling Unit (MDU), Direct in Ground (DIG) and a minimum 5 work points. It is the responsibility of the Assessor to make sure all aspects of the Modular Guidance are covered.

**Demo PON's:** To make sure Orion is used where possible Demo PON's can be created within the Orion Training Environment. If no Ghost Plan (GP) exists in the Training Environment for the area you wish to use, you can request that the exchange area is loaded on by emailing [ororionasg@openreach.co.uk](mailto:ororionasg@openreach.co.uk) the 1141 code. Once loaded you will then be able to create your Demo PON Work Order.

All Demo PON Work Orders should be named as "S11\_Master\_enter location" Once you have created the Demo PON you will then need to contact [ororionasg@openreach.co.uk](mailto:ororionasg@openreach.co.uk) and provide them with the Work Order name so that it's not deleted during a Training Environment refresh.



When you are ready to carry out the assessment the delegate will need to search for your Work Order, then select the option to duplicate it, so they can begin to make the required changes. This duplicate should then be deleted once the assessment is complete.

## **7**      ***Delegate Details***

Module No	AEI/ACC/S011
Title	Accreditation for Surveyors
Date	
Delegate's name	
UIN/Licence No	
OUC	
Assessor's name	
Assessor's UIN	
Questionnaire	PASS/FAIL
Practical	PASS/FAIL
Notes	

**Questionnaire Scoring:**

Total Possible Score	Score Achieved	Required Score to Pass
60		48

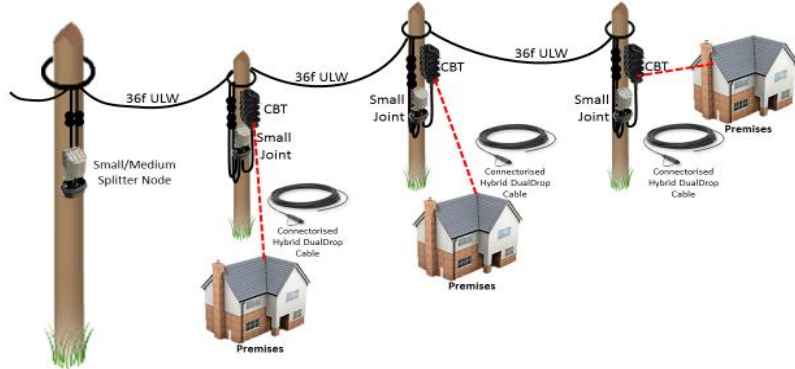
**Practical Scoring:**

Total Coaching Marks Available	Total Coached	Total Coaching Marks Allowed
13		4

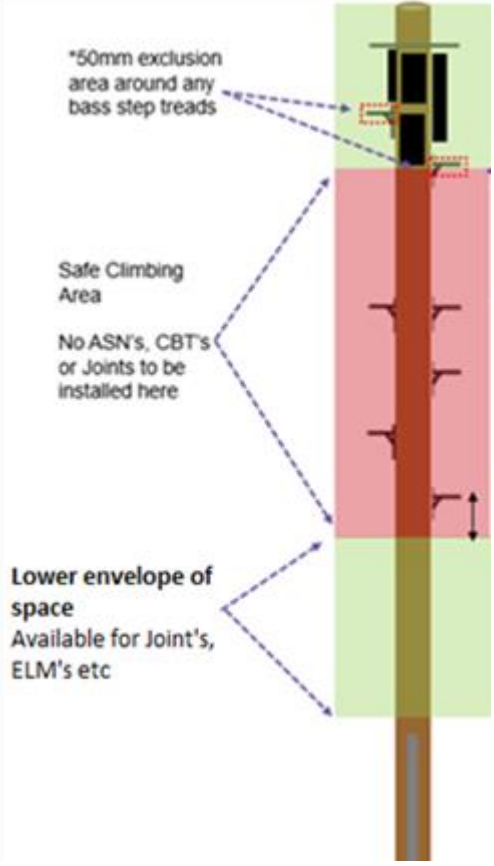
## 8 Questionnaire


1	What Health Safety Executive (HSE) regulation applies to all construction and planning work carried out by Openreach?  A. The Optical Design Management Regulation 2020 (ODMR) B. The Construction Design Management Regulation 2015 (CDM) C. The Wayleave Bypass Regulation 2018 (WBR)	
		<b>1</b>
2	Openreach network is defined as being near water when it is within what distance of a body of water? (A body of water' is defined as water which is of a depth or flow that would cause the person difficulty to get out unaided)  A. 4m B. 5m C. 6m	
		<b>1</b>
3	When surveying or planning for any new network near water, what guidance	

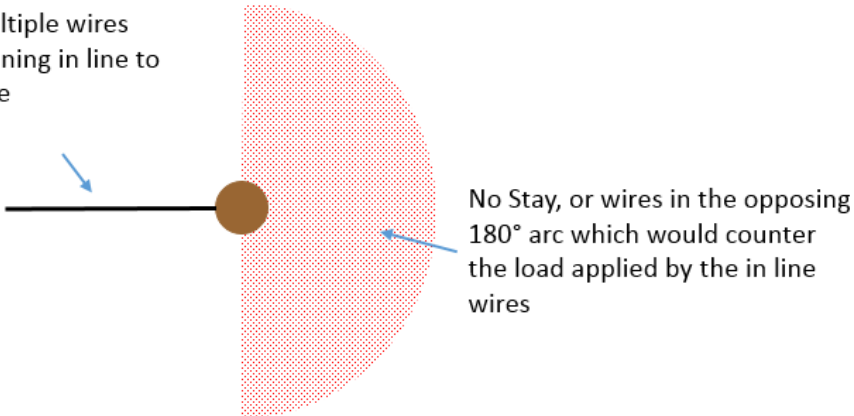
	<p>must be followed? Select all that apply</p> <p>A. All new network routes (overhead &amp; underground) should be planned to avoid providing new network within 5 metres of a watercourse wherever possible.</p> <p>B. There will be occasions where the only route available for our network will include passing within 5 metres of a watercourse. If this is our only option planners must avoid (where possible) any new joints, nodes, boxes, poles, cabinets etc. within 5 metres of a watercourse.</p> <p>C. If this is not possible due to cabling positions, road junctions, high costs, street works restrictions etc. then planners /surveyors should ensure that they provide enough information to enable field's teams to prepare the appropriate safety requirements.</p>	
		<b>1</b>
4	<p>Before entering an underground structure you must perform a gas test with a Gas Detection Unit (GDU). What types of gas are you testing for? Select all that apply</p> <p>A. Explosive</p> <p>B. Toxic</p> <p>C. Asphyxiating</p>	
		<b>1</b>
5	<p>The Fibre to the Premises (FTTP) network is designed using the Ghost Plan (GP) What is it?</p> <p>A. A plan for the best location for all our Aggregation Nodes (Agg)</p> <p>B. A modelling tool that plans our network blueprint of how we should deploy fibre throughout the Openreach network</p> <p>C. A One Fibre Network (OFN) plan made from local planners knowledge</p>	
		<b>1</b>
6	<p>We have a GP for every exchange in the country, should we follow this plan exactly?</p> <p>A. Yes, The GP will provide you with the most cost effective solution and it must be followed.</p>	

	<p>B. Yes, the GP will provide us with the best solution for the exchange area.</p> <p>C. No, the GP is only a model and its output solutions may not be optimal.</p>	
		<b>1</b>
7	<p>This is a picture of the Overhead (OH) and Aerial Network Distribution Design. When adding new wires what rule must we follow?</p>  <p>A. Fibre Attachment Cable Rule (FACR)</p> <p>B. Cable Height Span Rule (CHSR)</p> <p>C. Dropwires in Line of Route (DILOR)</p>	
		<b>1</b>
8	<p>The Connectorised Block Terminal (CBT) should be placed in the same location as the copper Distribution Point (DP). If the distance from the CBT to the customer is over 150m, what approach should be taken?</p> <p>A. A subsequent CBT will need to be placed closer</p> <p>B. The Project Manager needs to be informed via the Build Tracker</p> <p>C. The target premises need to be removed from the build programme</p>	
		<b>1</b>
9	<p>Where a single isolated property fed by carrier poles on private land is 297m from the planned CBT, what can be used to give service at the Lead 2 Cash (L2C) provision?</p> <p>A. Cable Optical Fibre (COF)250</p>	

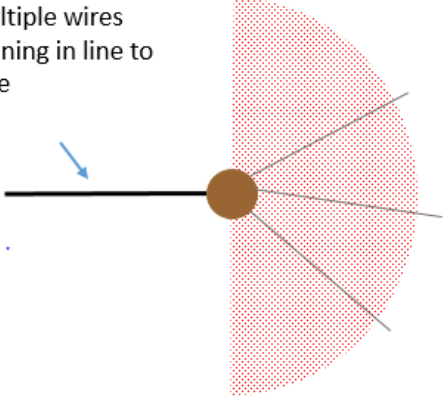
	B. 350m drop cable C. Underground (UG) armoured fibre cable	
		<b>1</b>
10	<p>AEI/AEC/B363 - Cabling through Trees Policy should be followed when trees have been encountered in your survey. In what circumstances would you plan for tree cutting?</p> <p>A. When cable deflections are greater than 10°</p> <p>B. Any time a cable comes into contact with a tree</p> <p>C. When cable deflections are greater than 30°</p>	
		<b>1</b>
11	<p>When surveying OH you must be aware that when the full build is complete you do not overload the pole. What ISIS document covers pole loadings?</p> <p>A. EPT/ANS/A011</p> <p>B. EPT/ANS/A013</p> <p>C. EPT/ANS/A014</p>	
		<b>1</b>
12	<p>In the picture the green highlighted areas are, the Top Envelope of Space and the Lower Envelope of Space. What is the minimum clearance required between the first climbing step and any new furniture?</p>	


	 <p>*50mm exclusion area around any bass step treads</p> <p>Safe Climbing Area No ASN's, CBT's or Joints to be installed here</p> <p>Lower envelope of space Available for Joint's, ELM's etc</p> <p>A. 750mm B. 900mm C. 450mm</p>	
		<b>1</b>
13	<p>Can you install a CBT in the Lower Envelope of Space?</p> <p>A. Yes, if there is no space in the Top Envelope of Space B. No, all block terminals can only be fitted in the Top Envelope of Space C. Yes, but only if you have asked for a network re-arrangement and there is no other option</p>	
		<b>1</b>
14	<p>When there is little or no room left in the Top Envelope of Space, what can we do to increase the space? Select all that apply.</p> <p>A. Install 2 way or 3 way back to back brackets</p>	

	<p>B. Lower the top bass step so it aligns with the step on the opposite side of the pole</p> <p>C. Remove all copper equipment</p> <p>D. Move CBT's into the lower pole envelope</p>	
		<b>1</b>
15	<p>The Ring Head No 2 (Halo) is used for what scenario?</p>  <p>A. It's installed to create a wider angle to serve customers</p> <p>B. It's installed so we can remove the crown ring</p> <p>C. It's installed when the pole has 50+ dropwires</p>	
		<b>1</b>
16	<p>Squids were introduced for deployment in hollow poles with a UG feed, can they be deployed to feed a hollow pole from OH?</p> <p>A. Yes, using dropwire techniques</p> <p>B. Yes, but they must be treated as Light Weight Aerial Cable (AC and attached using a Universal Pole Bracket (UPB)</p> <p>C. No, Squids can only be used UG)</p>	
		<b>1</b>
17	<p>What is the maximum number of ports using a Squid that can be fitted into a hollow pole?</p>	

	<p>A. 12</p> <p>B. 16</p> <p>C. 20</p>	
		<b>1</b>
18	<p>When installing new overhead fibre cables using the exceptional span lengths, what is the minimum wire install height across a carriageway?</p> <p>A. 5.9m</p> <p>B. 6.2m</p> <p>C. 6.5m</p>	
		<b>1</b>
19	<p>Where a pole has no stay or wires in an opposing 180 degree arc, what is the maximum number of cables permitted in line of route between two medium poles across a carriageway?</p> <div style="text-align: center;">  </div> <p>A. 3</p> <p>B. 4</p> <p>C. 5</p>	
		<b>1</b>
20	<p>Where a pole has wires in an opposing 180 degree arc, what is the maximum number of cables permitted in line of route between two light poles across a carriageway?</p>	

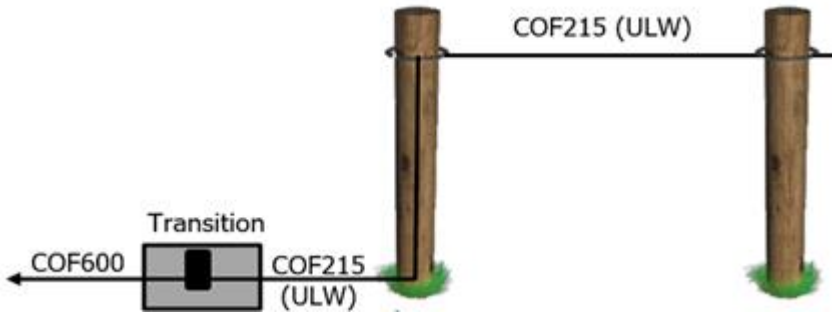



	<p>Multiple wires running in line to Pole</p>  <p>Wires exist in the opposing 180° Arc, which would counter the load applied by the in line wires</p> <p>A. 8 B. 9 C. 12</p>	
		1
21	<p>Supported by an A1024 what is the minimum height required at the lowest point above a carriageway that a drop wire can be erected?</p> <p>A. 5.9m B. 5.6m C. 5.5m</p>	
		1
22	<p>What are the maximum span lengths to a Bracket 32 and Bracket 44?</p> <p>A. 50m and 78m B. 40m and 68m C. 68m and 68m</p>	
		1
23	<p>Where limited space exists in the Top Pole Envelope to site 2 x 12port CBT's what could be used?</p>	

	 <p>A. Back to back mounting bracket B. 2 x 12 port squids C. A carrier pole</p>	
		1
24	<p>Where would you find information regarding the reason for a pole being classed as 'Decayed (D)'?</p> <p>A. GeoHub B. PIPeR C. ARTISAN</p>	
		1
25	<p>Is it permissible to fix a CBT on to a D pole?</p> <p>A. Yes, but a pole test would be required B. Yes, but only if the pole meets the strict criteria set out in ISIS EPT/OHP/C031 - Working On D Poles, Including Joint User Poles (JUP) C. No, we cannot install CBT's on D poles</p>	
		1
26	<p>Which of the following pieces of equipment cannot be fitted to a JUP?</p> <p>A. Small Termination Multi-Function (TM) Node</p>	



	<p>B. Medium TM Node</p> <p>C. CBT's</p> <p>D. Ultra-Light Weight (ULW) cables</p> <p>E. Hybrid Dual Drop Cable (OH)</p>	
		<b>1</b>
27	<p>What's the minimum clearance required when flying drop cables above and below Aerial Bundled Cable (ABC) power cables?</p> <p>A. 600mm below and 600mm above</p> <p>B. 600mm below and 500mm above</p> <p>C. 600mm below and 400mm above</p>	
		<b>1</b>
28	<p>A proposed COF ULW overhead route passes under High Voltage (HV) electricity cables, is this permissible?</p> <p>A. Yes, up to 11kv</p> <p>B. Yes, up to 33kv</p> <p>C. No, we cannot install COF215 ULW under HV</p>	
		<b>1</b>
29	<p>Can you plan to install new attachments onto HV Poles?</p> <p>A. Yes, if the equipment is installed at the correct distances from the HV wires</p> <p>B. No, we cannot add new attachments to HV poles</p> <p>C. Yes, if we can get the right wayleave signed from the owner of the pole</p>	
		<b>1</b>
30	<p>If you arrived on site to find the copper DP is attached to a JUP which is no longer used by the electricity company and all the electricity equipment is removed, what action would you take and why?</p> <p>A. Provide the most cost-effective solution. Likely renew pole or follow D pole process</p>	

	<p>B. Plan CBT as per ghost plan as the pole can still be used</p> <p>C. Call the electricity company and ask their permission to install new equipment</p>	
		<b>1</b>
31	<p>When considering use of a JUP which companies haven't agreed a licence? select all that apply</p> <p>A. Electricity Northwest</p> <p>B. UK Power Networks</p> <p>C. Western Power Distribution</p> <p>D. Northern Power Grid</p> <p>E. SP Energy networks</p> <p>F. West and Wales Distribution</p> <p>G. Southern Electricity Networks</p>	
		<b>1</b>
32	<p>What options must you consider before planning new fibre plant on a Distribution Network Operator (DNO) pole where no Openreach plant exists? Select all that apply.</p> <p>A. DNO agreement for the new fibre attachments</p> <p>B. New wayleave must be signed on private land pole locations</p> <p>C. Nothing, plan to install new plant</p> <p>D. Mark pole as DNO on Geohub and plan to install new plant</p>	
		<b>1</b>
33	<p>On a DNO pole what does the label J10 mean?</p> <p>A. The JUP can have a minimum 10 iron work attachments</p> <p>B. The J10 means the pole can accept 10 pair AC only</p> <p>C. The JUP has a licence for a maximum of 10 attachments</p>	
		<b>1</b>
34	<p>What is the maximum number of wires we can attach to a DNO pole?</p>	

	<p>A. 8 drop cables</p> <p>B. 10 drop cables</p> <p>C. 10 copper wires and 10 fibre cables</p>	
		<b>1</b>
35	<p>Which solution is viable as a civils avoidance option to overcome a duct blockage or congested duct?</p> <p>A. We can use the overhead network (if it's existing) using the new 75m over a carriage way and 85m non road crossing span rule but this needs Chief Engineer approval</p> <p>B. Leave the target premises off the build programme</p> <p>C. Run the cable along the nearest house to get past the blockage/congestion</p>	
		<b>1</b>
36	<p>Transitioning from COF600 (UG) to COF215 (OH) should be performed at the nearest convenient point and only performed to avoid excessive use of COF215 in the underground network. What rule must be followed when installing COF215 UG?</p> <div style="text-align: center;">  </div> <p>A. COF215 can only be pulled in with a 2kn fuse to avoid damage</p> <p>B. COF215 must only be installed using "Hand Pull" cabling techniques.</p> <p>C. COF215 must not be pulled in more than 2000m from the OH network</p>	
		<b>1</b>
37	<p>When installing a UG CBT on a MOBRA arm, what is the minimum recommended distance between the CBT port plugs and existing cables / joints?</p>	

	 <p>A. 100mm B. 150mm C. 200mm</p>	
		1
38	<p>When installing a TM Series Joint in a UG structure and using guidance from ISIS NWK/LNK/C573 – TM Joint Box Capacity. What must not be obstructed?</p> <p>A. The box steps B. The duct mouths C. The box drain</p>	
		1
39	<p>When the UG structure has limited space available what network component be can deployed, provided that all equipment installation meets the quality standards stated in EPT/ANS/A040?</p> <p>A. The new 36 Port Small Compact Block Terminal B. A Squid C. TM Series CBT/Joint 8 Port Combination Terminal</p>	
		1
40	<p>How many CBT cable tails can be fitted into a Medium TM Splitter Node, in a loop through configuration?</p>	

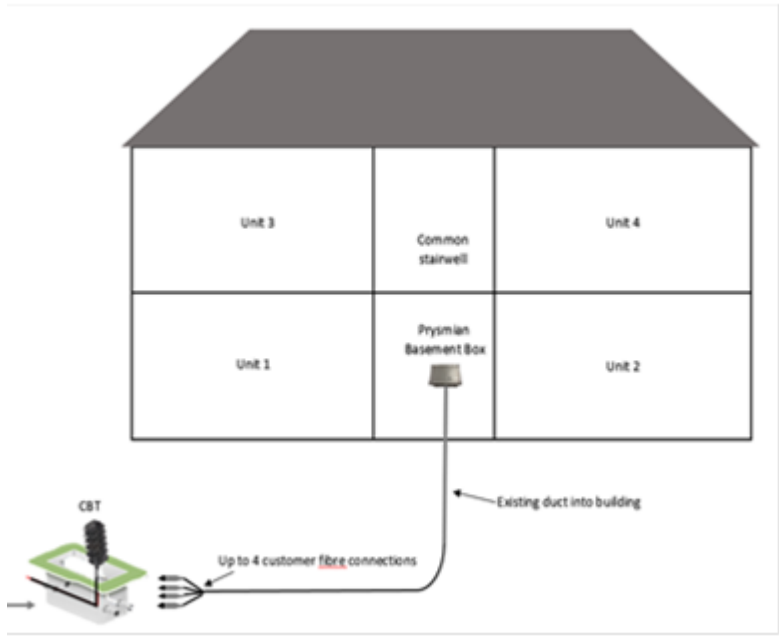
	A. 12 B. 14 C. 16	
		<b>1</b>
41	<p>The distribution fibre network is expected to follow a 'daisy-chain' design, Why is this important?</p> <p>A. To save the build teams time with excess cabling.</p> <p>B. This prevents high light loss as the network has less cable.</p> <p>C. To reduce the provision of multiple cables along the same route causing congestion in the ducts.</p>	
		<b>1</b>
42	<p>When planning the network we will dimension to a maximum of what address points to each 2x32 Splitter?</p> <p>A. 28</p> <p>B. 30</p> <p>C. 32</p>	
		<b>1</b>
43	<p>When designing the OFN what should be the ultimate consideration?</p> <p>A. The L2C customer connection will be easier and certainly no more complex than the copper connection.</p> <p>B. The network should be built as fast as possible, L2C survey all tasks and will identify any build issues.</p> <p>C. The network should be as easy as possible for the build engineers so they can deliver the targeted premises as fast as possible</p>	
		<b>1</b>
44	<p>If you have 12 address points to be served from one location, what CBT port capacity would you plan for?</p> <p>A. 2 x 8 port CBT's</p>	

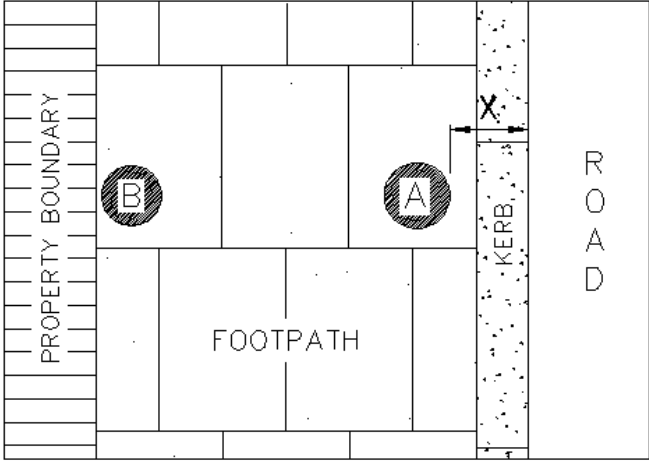
	<p>B. 1 x 12 port CBT</p> <p>C. 1 x 12 port and 1 x 4 port CBT's</p>	
		<b>1</b>
45	<p>What is the ISIS document for Fibre to the Premises (FTTP) brownfield scale architecture?</p> <p>A. NWK/LNK/C541</p> <p>B. NWK/LNK/C563</p> <p>C. NWK/LNK/C554</p>	
		<b>1</b>
46	<p>What is the maximum distance a Splitter Node can be sited from the serving Agg Node?</p> <p>A. 1000m</p> <p>B. 1500m</p> <p>C. 2000m</p> <p>D. There is no constraint on the maximum distance</p>	
		<b>1</b>
47	<p>The pictures are of Jointing Bricks. How should these be treated at survey stage?</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>A. The properties should be treated as Direct in Ground (DIG)</p> <p>B. They should be classed as Multi Dwelling Unit (MDU)</p>	



	C. A poling solution should be planned	
		<b>1</b>
48	<p>DIG areas are classed as Full DIG or Partial DIG, please select the true statement</p> <p>A. Partial DIG areas have a serviceable trunk network (box to box) and the CBT can be located in the appropriate box. L2C orders will drive the swept tee civils</p> <p>B. Partial DIG areas have been permanently suspended.</p> <p>C. Partial DIG areas must have a new toby installed at the curtilage of each property, L2C orders will connect from the toby to the customer</p>	
		<b>1</b>
49	<p>Where a premise has two potential SNN conflicts, such as the CBT is on a JUP but the feed is Partial D.I.G. What SNN is the priority?</p> <p>A. It doesn't matter, the L2C engineer will fix it on the day</p> <p>B. The one that drives a KCI2 Assure order journey (Survey marker = 'Y'). Then add appropriate notes.</p>	
		<b>1</b>
50	<p>Good Survey Marker's (SM's) and Survey Network Note's (SNN's) are critical for a smooth L2C journey. What ISIS document governs them?</p> <p>A. EPT/ANS/A068</p> <p>B. EPT/ANS/A040</p> <p>C. EPT/ANS/A047</p>	
		<b>1</b>
51	<p>When an MDU can be built fully externally it is acceptable for the Total Homes Passed (THP) to be included in the PON Survey. What must you have in place before you can proceed?</p> <p>A. The surveyor must ensure each customer has signed the Service Agreement Form, without this we cannot build the MDU</p> <p>B. You must ensure all wayleaves are in place and permission has been granted by the building owner. If this cannot be obtained, they must leave the</p>	

	MDU to be built by the MDU P&B team, leaving the capacity within 150m of the MDU.  C. A detailed building survey must be uploaded to the Central MDU Build email address mdubuild@openreach.co.uk	
		<b>1</b>
52	<p>What action would you take if a single property contained 40 addresses all currently served by a copper internal DP?</p> <p>A. Leave the capacity at the splitter position as near as possible to the MDU, allocating full capacity for the whole building.</p> <p>B. Build the capacity to an intermediate joint in the closest available jointing chamber to the MDU. If the MDU is within 150m of the Agg Node location the capacity can be left there.</p> <p>C. Remove the THP from the project completely, the head end .capacity will be used elsewhere.</p>	
		<b>1</b>
53	<p>Where an MDU is to be served from a wall box solution, what type of CBT must be used?</p> <p>A. 24 port Slim Box</p> <p>B. Pushlok Miniature CBT</p> <p>C. Pushclip Discrete CBT</p>	
		<b>1</b>
54	The picture is of a small MDU with 4 address points and its internal fed. What cable could be used to serve this type of building?	

	 <p>A. 4f Z Cable B. 4f M Cable C. 4f X Cable</p>	
		<b>1</b>
55	<p>Where a single property is fed via a direct in ground fibre cable, what should you mark the Customer Splice Point (CSP) and female Optitap as?</p> <p>A. CSP recorded as a CSP as per normal working, Optitap unrecorded B. CSP recorded as a transition joint, Optitap recorded as a CBT C. CSP recorded as a splitter node, Optitap recorded as a CBT</p>	
		<b>1</b>
56	<p>When planning a pole near a kerb edge, we must try and maintain a minimum distance. What is the measurement of X?</p>	

	 <p>A. 300mm B. 1m C. 500mm</p>	
		1
57	<p>When positioning new poles what practical and engineering aspects must you consider? Select all that apply.</p> <p>A. Span length limits B. Safe access to the pole C. Ground conditions, avoid sloping ground if possible D. Is the pole location on private or public land E. Likelihood of multiple objections F. Potential hazards like high pressure pipes</p>	
		1
58	<p>Openreach's current range of creosoted wooden poles cannot be used within what areas?</p> <p>A. school playgrounds, play areas or other places where children will congregate. B. Police station grounds C. Hospital grounds</p>	

		<b>1</b>
59	<p>What is the minimum width of footpath that should be maintained when planning a new pole in the footway?</p> <p>A. 1.5m</p> <p>B. 1.2m</p> <p>C. 1m</p>	
		<b>1</b>
60	<p>Planning Policy Briefing 827 highlights an option if a UG structure has no spare capacity for our planned Node. What is that option?</p> <p>A. Remove the Node from the plan and cable all the customers 305m back to another Splitter</p> <p>B. Order a fast track box rebuild with a 4hr response</p> <p>C. We have the option that we could utilise a nearby pole if available, avoiding costly civils to rebuild the box.</p>	
		<b>1</b>
	<b>TOTAL</b>	<b>60</b>
	<b>PASS</b>	

## 9 ***Modular Guidance (Practical)***

The below table should be used as a guide for the Assessor to accurately assess the Delegates knowledge and ability during the practical assessment.

Coaching Marks 'C' are explained in the Measurement section and the total allowed can be found in Delegate Details.

If an Assessment Pointer is followed by an 'X' then not only is no coaching allowed, but failure to meet the standard on the Assessment Pointer means that the standard has not been met for the accreditation as a whole.

Task Assessment	Assessment Pointer		Document Guidance
<b>Questionnaire</b>	Completed 80% or above	X	
<b>Trained /Skilled</b>	Is the delegate experienced and craft competent in this skill?	X	
	Has the delegate completed the prerequisites	X	
<b>Safety</b>	All safety procedures followed, and safe working practices adopted	X	EPT/ANS/A022
	LSBUD (Line Search Before you Dig) process followed	X	SFY/HSH/D053
<b>Risk Assessment</b>	An on-site risk assessment should be carried out	X	SFY/GRA DOCUMENTS
<b>Personal Protective Equipment (PPE)</b>	Correct PPE held, in good condition and used where necessary	X	CPE/NNS/V060
<b>Environment</b>	Weather conditions considered before commencing work	C	
<b>Equipment Available</b>	Delegate has the correct tools and they are in good condition to complete the task to the current work practices and quality standards	X	EPT/UGP/B009
	Tools used correctly and safely	X	
<b>Survey Process</b>	Delegate understands job documentation, prints and plans	X	
	Delegate understands current FTTP policy	X	NWK/LNK/C541
<b>Underground Network</b>	Correct underground structure types identified	C	
	Delegate understands correct use and requirements for underground structures	X	NWK/LNK/C573

	when siting equipment		
	Duct space limitations identified and considered	X	
	Customer ducted lead ins correctly identified.	C	NWK/LNK/C541
	Most economical and practical route selected	X	
	Joint boxes assessed correctly to accept new duct	X	
	CBT placed in accordance with 150m rule	X	NWK/LNK/C541
<b>New Underground Network</b>	Correct type of joint box selected to accommodate duct and surface type	X	
	Correct type of joint box selected for the type of equipment used	X	NWK/LNK/C573
	Box positioned where it is safe to access	X	
	Boxes placed at suitable positions and distances apart	X	
	Narrow trenching considered in soft ground where the required	C	
	Any civils defects observed, reported on CANDID	X	
<b>Overhead Network</b>	Delegate understands route stability requirements	X	EPT/ANS/A014
	Delegate understands overhead height requirements and climb heights	X	
	Delegate understands DILOR (Dropwires In Line Of Route) requirements	X	EPT/ANS/A011
	Delegate understands Tree Cutting requirements and use of Protector Cable Abrasion	C	
	D Poles considered and understood, can explain PIDOC	C	
	Delegate understands EL	X	

	joint user rules for fibre		
	Delegate understands polling rules and restrictions	X	
	Maximum span length considered	X	EPT/ANS/A011
	Clear line of sight looked for at customers premises	C	
	Platform access (if required)	C	EPT/OHP/C031
	Clearance when passing under or over EL cables	X	EPT/PPS/B026
	Not attaching to EL joint user poles with no Licence for fibre	X	
	Has a Cable Coil Bracket been considered if an embankment or ditch is encountered	C	NWK/LNK/C541
<b>CBT</b>	Delegate understands CBT dimensioning and limitations	X	
	Delegate understands use of Connectorised Terminal Compact (Squid) limitations	X	
	Delegate has considered single port CBT to remote premise	C	
<b>MDU</b>	MDU's identified and correct network planned to serve building	X	NWK/LNK/C563
<b>Survey Return</b>	Correct NAD's captured in survey	X	
	Correct Survey Marker and Survey Network Note's used	X	EPT/ANS/A068
	A55 clearly showing the work required and meets A55 standards	X	
	Cost tracker completed and submitted in survey return (where required)	C	
	TMA information provided	X	
	Correct 12-point numerical grid references supplied	X	
	Synthetics provided where required	C	



<b>Regulatory</b>	Permissions identified where planning restrictions apply e.g. conservation areas, sites of scientific interest, areas of outstanding natural beauty, National parks, ancient monuments and Grade 1 / Category A Listed buildings Regulations	X	EPT/OAM/F026
<b>Wayleaves</b>	All public land options considered before planning on private land	X	
	Private landowner and tenant details identified and provided where possible	C	
	All line plant requiring a wayleave clearly identified on survey return with grid references	X	

## 10 *References*

All the documents below are available through the sites and systems described in the Introduction section. If you require access to external sources within them, then please contact the Author (see above) of this accreditation module.

**Assessors Note:** All Openreach people should have access to the Policy & Build app via their work mobile phones. Please make sure that this App is accessed during the accreditation.

- SFY/HSB/A001 - Health & Safety Handbook (Openreach only).
- CPE/NNS/V060 - Guide to Health & Safety Minimum Standards.
- SFY/HSB/C031 - Openreach Construction Design Management (CDM) 2015 Regulations Policy.
- SFY/HSB/D043 - Working in Vicinity of O/H Power (LV & HV) and Joint User Poles
- SFY/HSB/D053 - Planning Excavations Including Hazardous Pipeline and Zone of Interest Process (HPP & ZOI)

- EPT/ANS/A040 - One Fibre Network – Build Quality Manual for Engineers  
Additional reference material is available via the Author of the document (see above)
- EPT/ANS/A068 - Survey Network Note's & Survey Markers
- EPT/ANS/A011 - Specification for Dropwire Work
- EPT/ANS/A014 - Specification for Overhead Route Stability
- NWK/LNK/C541 - FTTP - Brownfield - Scale Architecture – Policy
- NWK/LNK/C563 - MDU/MOU - Policy
- NWK/LNK/C212 - Fibre – Spine Planning – Policy
- NWK/LNK/C591 - FTTP - X and Y Cable - Policy
- NWK/LNK/C573 - TM Node Joint box Capacity
- NWK/LNK/C517 - JUP - Joint User Poles - Policy
- EPT/UGP/B009 - Removal & Replacement
- EPT/OAM/F026 - Environmental Obligations
- EPT/OHP/C031 - Working on D Poles, Including Joint User Poles
- EPT/PPS/B026 - Code of Practice
- AEI/AEC/B311 - Attachment of Plant to “D” and “SD” Poles
- AEI/AEC/B337 - Change to the 68m overhead span rule
- AEI/AEC/B309 - Pole Stepping on Congested Poles
- AEI/AEC/B329 - Halo ring (Ring Pole Head No.2) installation procedure
- NWK/LNK/C212 - Fibre – Spine Planning – Policy
- Planning Policy brief 777
- Planning Policy brief 827
- Planning Policy brief 837
- Network Policy Briefing 893
- Network Policy Briefing 901

<b>END OF DOCUMENT</b>
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