

# **Wireless Communications Rigger Apprenticeship**

## **Level 2**

### **End-point Assessment Plan**

## Introduction

This document sets out the requirements for End-Point Assessment (EPA) for the Wireless Communications Rigger apprenticeship standard. It is written for End-Point Assessment organisations who need to know how the EPA must be delivered. It will also be of interest to Wireless Communications Rigger apprentices, their employers and training providers. Full time apprentices will typically spend 18 months on-programme (minimum of 12) working towards the apprenticeship standard, with a minimum of 20% off-the-job training.

The Wireless Communications Rigger End-Point Assessment (EPA) will confirm that the apprentice has demonstrated the required skills, knowledge and behaviours set out in the standard. The assessment plan design is driven by the following principles:

- competency through workplace performance
- the ability to meet specified industry standards of competence
- the ability to demonstrate the requisite knowledge, skills and behaviours that support workplace performance

The EPA will consist of three elements:

- Practical Assessment (components 1, 2 and 3)
- Professional Discussion (component 4)
- Knowledge Test (component 5)

## End-Point Assessment Gateway

The EPA should start once the employer is satisfied that the requirements for EPA have been met and can be evidenced to an End-Point Assessment organisation; and that the apprentice is consistently working at or above the level set out in the standard.

- Apprentices who have not achieved English and maths at level 2 must have achieved level 1 English and maths and have taken the test for level 2. For those with an education, health and care plan or a legacy statement the apprenticeship's English and maths minimum requirement of Entry Level 3 and a British Sign Language qualification are an alternative to qualifications for whom this is their primary language.

Apprentices are also required to submit a portfolio of evidence two weeks prior to the EPA. The portfolio itself will not be assessed; it is designed to support the professional

discussion. The portfolio must contain at least one piece of evidence mapped clearly to each of the knowledge, skills and behaviours (KSBs) assigned to the professional discussion. Although each piece of evidence may map to more than one KSB, this will typically result in 10 pieces of evidence to cover all the relevant KSBs. It should not include any self-reflective evidence. Employers/training providers are free to devise their own version of the portfolio of evidence, but it will typically be made up of:

- Details of safe systems of work the apprentice has worked to
- Details of site schematic drawings and radio design scopes the apprentice has worked to
- Photographic/video evidence of installations
- Photographic/video evidence of lifting/rigging tasks
- Photographic/video evidence of climbs on a minimum of 3 separate structures
- Quarterly employer written appraisal for the duration of the apprenticeship
- Certification of training the apprentice has completed for the duration of the apprenticeship

Ideally, any employer contributions should focus on direct observation of evidence (e.g. witness statements) of competence rather than opinions. The employer must sign off the portfolio of evidence, thereby authenticating it and confirming the demonstration of competence against the KSBs assigned to the professional discussion.

### **Assessment**

It is recommended that all assessment methods are completed within the same calendar week but to aid manageability can be completed within a two-calendar week period. The EPA must take place within three months after the apprentice has met the gateway requirements.

### **Practical Assessment (components 1, 2, 3)**

The practical assessment can be at the employers' premises or at a location designated by the EPA organisation, as long as the nominated facilities, infrastructure and equipment are in place in accordance with BS8454:2006- Code of Practise for the delivery of training and education for work at height and rescue.

The practical assessment consists of three separate components, representing the fundamental duties a Wireless Communications Rigger would need to be able to perform effectively to be occupationally competent:

- Climbing and Rescue
- Lifting and Rigging
- Antenna Installation

Due to the safety-critical nature of the role and the potential consequences if mistakes are made the practical assessment grading is pass/fail. Apprentices must pass all 3 components to achieve an overall pass grade.

The times referred represent the maximum time allowed for each practical element. This does not include breaks which are allowed in accordance with the working time directive. Apprentices may finish early but must complete the components within the time allowed, otherwise the practical test will be marked as a fail. The apprentice must achieve a pass in all three practical components to pass the practical assessment.

**Practical Component 1: Climbing and Rescue – 6 hours (+/- 10% at discretion of assessor)**

This component must take place where there is access to a climbing tower/mast up to 16 metres in height, a monopole structure and a rooftop platform. Apprentices must have access to working at height safety equipment, harnesses and PPE.

Apprentices are required to:

- Carry out a PPE inspection
- Carry out and document an onsite dynamic risk assessment complying with a valid safe system of work
- Select and deploy workplace signage and guarding
- Safely work at height and apply the correct climbing techniques on
  - a tower or mast
  - a rooftop
  - a monopole
- Select and use work restraint, work positioning and fall arrest equipment following manufacturer's instructions and company policy
- Correctly use fall arrest systems
- Correctly select safe and suitable anchor points
- Perform a rescue at height using snatch and assisted lower techniques

- Deliver first aid to the casualty

**Practical Component 2: Rigging and Lifting – 4 hours (+/- 10% at discretion of assessor)**

This component must take place where there is access to a climbing structure. Apprentices must have access to working at height safety equipment, harnesses and PPE.

Apprentices are required to:

- Carry out a PPE inspection
- Carry out and document an onsite dynamic risk assessment complying with a valid safe system of work
- Select and deploy workplace signage and guarding
- Correctly select and use appropriate tools and equipment when working at height
- Safely select slings, shackles and associated lifting equipment maintaining safe working loads (SWL)
- Correctly install ropes and blocks in relation to structure type and equipment loads
- Apply correct climbing techniques on a structure
- Carry out the safe application of knots and understanding of safe working loads in relation to knot selection
- Use slings, knots and other attachment techniques to safely lift and lower materials and equipment
- Carry out the correct application of winches
- Lift and lower a load

**Practical Component 3: Antenna Installation 4 hours (+/- 10% at discretion of assessor)**

This component must take place where there is access to a mounted antenna. Apprentices must have access to working at height safety equipment, harnesses and PPE.

Apprentices are required to:

- Carry out a PPE inspection

- Carry out and document an onsite dynamic risk assessment complying with a valid safe system of work
- Select and deploy workplace signage and guarding
- Read, interpret and work to technical drawings and designs
- Safely work at height and apply the correct climbing techniques on a structure
- Carry out antenna alignment
- Correctly select antenna in relation to feeder and technology
- Correctly identify transmission lines (feeder selections)
- Carry out connector terminations
- Carry out feeder testing (correct selection of open/short loads)

#### **Professional Discussion (component 4) – 90 mins (+/- 10% at discretion of assessor)**

The professional discussion is a recorded one-to-one interview between the apprentice and an Independent assessor, using Appendix A for guidance on what Knowledge, Skills and Behaviours the Assessor is looking to evidence from the apprentice. The portfolio of evidence will be used by the apprentice to provide evidence to support the discussion and will not in itself be assessed or contribute to the overall grade. The assessor must review the portfolio prior to the discussion and use it to prepare questions. The discussion must take place in a controlled environment free from distraction or influence. This can be on employer premises or a location designated by the EPAO, taking into consideration any relevant access requirements. In the interests of affordability, the discussion may take place digitally via video conferencing. If using video conferencing facilities, the EPAO must ensure appropriate measures are in place to prevent misrepresentation, for example, screen share and 360-degree camera function with assessors.

The apprentice will be asked 20 open questions, with follow-up questions permitted if clarification is required. Questions will be pre-selected (from a bank maintained by the EPAO) by the assessor, but they may also write their own questions pertinent to the portfolio, to ensure full coverage of the KSBs allocated to this method as per Appendix A. EPAOs must develop question banks of sufficient size to prevent predictability and review them regularly (at least once a year) to ensure they, and the specifications they contain, are fit for purpose.

#### **Knowledge Test (component 5) – 1 hour**

The knowledge test will take place under exam conditions, in the presence of an EPAO assessor/invigilator and must assess the knowledge allocated to this method as per Appendix A. The knowledge test must be closed book i.e. the apprentice cannot refer to reference books or materials, can be electronic or paper-based with an invigilation ratio of 1:20.

The test will consist of 60 multiple choice of closed response and scenario-based questions written at the standard of level 2. All questions present 4 choices. Each correct answer is assigned 1 mark; any incorrect or missing answers are assigned 0 marks. The test must be marked by EPAO Independent Assessors or markers following a marking guide produced by the EPAO; electronic marking is permissible. Question papers should include 20 questions from each of the 3 modules testing all topics in each module.

<b>Module</b>	<b>Health, Safety &amp; Environmental</b>	<b>Technical</b>	<b>Rigging &amp; Working at Height</b>
Number of questions covering each topic within the module	20	20	20

<b>Grading boundaries</b>	<b>Fail</b>	<b>Pass</b>	<b>Distinction</b>
<b>Marks</b>	0-34	35-49	50-60

EPAOs must develop question banks of sufficient size to prevent predictability and review them regularly (at least once a year) to ensure they, and the specifications they contain, are fit for purpose.

### **Overall End-Point Grading**

Independent Assessors must individually grade each assessment method: fail/pass for the practical components and fail/pass/merit distinction for the professional discussion and knowledge test. The overall apprenticeship grade will be fail, pass or distinction according to the requirements set out below. An Independent assessor must combine the grades of all assessment methods to determine the over EPA grade. To achieve an EPA pass, apprentices must achieve a minimum of a pass in all assessment methods.

Practical Assessment	Professional Discussion	Knowledge Test	Overall Grade
Pass	Pass	Pass	<b>Pass</b>
Pass	Distinction	Pass	<b>Pass</b>
Pass	Pass	Distinction	<b>Pass</b>
Pass	Distinction	Distinction	<b>Distinction</b>

### Re-sit and Re-take Information

Apprentices who fail any component of the EPA will be offered the opportunity to take a resit/retake. It is only necessary for apprentices to resit/retake only the components that they have failed. This also applies to the practical components, i.e. if practical component 2 is failed only practical component 2 requires re-sitting/re-taking. Re-sits/re-takes must not be offered to apprentices wishing to move to a higher grade, the number of re-take opportunities will be determined by the employer. A re-sit does not require further learning, whereas a re-take does.

The apprentice's employer will need to agree that a re-sit/re-take is an appropriate course of action. Apprentices should have a supportive action plan to prepare for the re-sit-re-take. An individual EPA method re-sit/re-take must be taken during the maximum EPA period within 3 months of the original test. The amount of re-take opportunities will be determined by the employer.

### End-point Assessment Organisations

Employers must choose an Independent EPAO approved to deliver the EPA for this apprenticeship from the Education & Skills Funding Agency's (ESFAs) Register of End-Point Assessment Organisations (RoEPAO).

### Independent Assessor Requirements

EPA organisations must appoint Independent Assessors to oversee the practical assessment and conduct the professional discussion. They must meet the following criteria:



- Be Independent of the apprentice, their employer and training provider(s) i.e. there must be no conflict of interest
- Have recent relevant experience of the occupation/sector at least the same level as the apprentice gained in the last two years or significant experience of the occupation/sector
- Have worked in supervisory role in the industry
- Hold valid, in date advanced working at height and rescue, rigging and lifting, antenna installation and radio frequency identification/certification
- Be competent to assess - achieved a relevant recognised Assessor qualification
- Have up to date Continuing Professional Development (CPD) records and plans with typically thirty hours or more CPD per annum

### **Internal Quality Assurance**

- Internal quality assurance refers to the requirements that EPA organisation must have in place to ensure consistent (reliable) and accurate (valid) assessment decisions. EPA organisations for this EPA must undertake the following:
  - Appoint Independent Assessors that meet the requirements as detailed in this plan
  - Provide training for Independent Assessors in terms of good assessment practice, operating the assessment tools and grading
  - Have quality assurance systems and procedures that support fair, reliable and consistent assessment across the organisation and over time
  - Operate moderation of assessment activity and decisions, through examination of documentation and observation of activity, with a minimum of 20% of each Independent Assessors' assessments moderated
  - Operate regular standardisation events that enable Assessors to attend a minimum of two events per year

### **External Quality Assurance**

External quality assurance for this apprenticeship standard will be undertaken by the Institute for Apprenticeships.

### **Projected Starts**

The expected number of starts for this apprenticeship is 50 per year.

### **Affordability**

Affordability has been built into the plan in the form of video conferencing as an option by which to conduct the professional discussion; and the ability of EPAOs to conduct the knowledge test.

## Appendix A

### End-Point Assessment Mapping

On completion of the apprenticeship the Wireless Communications Rigger will have		Assessment Method		
		PA	KT	PD
K1	Current Industry health, safety and environmental legislation such as The Working at Height Regulations (2005), and company-specific requirements for safe working practices		X	
K2	Hazards of exposure to radio-frequency energy and the associated safe working practices and relevant legislation such as The Control of Electromagnetic Fields at Work regulations 2016		X	
K3	Personal site safety responsibilities, hazards, risks and control measures			X
K4	The methods and procedures for recording, reporting and dealing with hazards and risks and the necessary control measures required			X
K5	The hierarchy of risk		X	
K6	Responding to problems and emergencies in the work place and providing suitable solutions			X
K7	The inspection and maintenance of Personal Protective Equipment and the procedures to follow when detecting defects or damage	X		
K8	The Radio Frequency spectrum including current and future technologies and the main difference between frequencies within the full radio spectrum		X	
K9	The key components of a wireless telecom site and their functions		X	
K10	The types, sizes and weights of key site components such as antennas, amplifiers and duplexing units		X	
K11	The correct network installation and Network Operators' testing requirements			X
K12	The tools and equipment used in to install, maintain and decommission sites		X	
K13	Site schematic drawings and radio design scopes			X
K14	Radio Frequency monitoring equipment functions and working parameters		X	
K15	Structure integrity and the importance of permanent attachment whilst working at height		X	
K16	The safe access, egress and rescue plans for working at height		X	
K17	The hazards and risks associated with working at height - including the work environment		X	
K18	The loads and forces that are applied when rigging and how to estimate them		X	
K19	Permissible loads on structures		X	
K20	Slings, knots and other attachment techniques for the safe lifting and lowering of materials and equipment to height	X		X

K21	The importance of effective communication	X		X
K22	The need for positive working relationships			X
K23	Verbal and non-verbal signs and signals	X		
<b>On completion of the apprenticeship the Wireless Communications Rigger will have</b>		<b>Assessment Method</b>		
		<b>PA</b>	<b>KT</b>	<b>PD</b>
S1	Apply relevant safety legislation, codes of practice and safe working practices to self and others within the working environment	X		
S2	Safely use, store and maintain tools and equipment in accordance with manufacturer's guidance and the employer's operational and health and safety requirements including Control of Substances Hazardous to Health (COSHH) and asbestos awareness	X		
S3	Follow accident reporting and security procedures, deal with security breaches in the workplace following organisational processes			X
S4	Carry out and document an onsite dynamic risk assessment complying with a valid safe system of work	X		
S5	Select and deploy workplace signage and guarding	X		
S6	Carry out first aid	X	X	
S7	Carry out antenna installation, alignment, optimisation and testing to network requirements	X		
S8	Carry out installation, earthing and termination of coax and fibre following manufacturers and operators' installation specifications	X		
S9	Carry out installation and demonstrate the technical understanding of the key components of a wireless telecom site	X		
S10	Use an Open, Short and Precision Load in the testing of cables and antenna systems for impedance and loss	X		
S11	Select and use work restraint, work positioning and fall arrest equipment following manufacturer's instructions and company policy	X		
S12	Use slings, knots and other attachment techniques to safely lift and lower materials and equipment	X		
S13	Safely work at height applying the correct tower climbing techniques	X		
S14	Works comfortably and competently on any site type (rooftop, Greenfield, street works), correctly using fall arrest systems	X		
S15	Correctly select and use appropriate tools and equipment when working at height	X		
S16	Carry out a rescue from a tower or a structure using snatch and assisted lower techniques	X		
S17	Read, interpret and work to technical drawings and designs			X

S18	Effectively communicate with all stakeholders including colleagues, contractors and members of the public	X		X
S19	Effectively contribute to the team and develop positive working relationships			X
S20	Apply verbal and non-verbal signs and signals when communicating as part of a team	X		
<b>On completion of the apprenticeship the Wireless Communications Rigger will have</b>		<b>Assessment Method</b>		
		<b>PA</b>	<b>KT</b>	<b>PD</b>
B1	Work safely and reliably by taking responsibility for their own and others' health, safety and security.	X		
	Report accidents, near misses and unsafe conditions and practices without delay.			X
	Challenge unsafe behaviours and incorrect work practices and procedures			X
B2	Take responsibility for their own actions and standards of work	X		
	Be aware of the limits of their own competence and seek advice when required.			X
	Cooperate with employers, other employees and site providers to ensure that their competence is maintained and up to date			X
B3	Show enthusiasm and a willingness to learn			X
	Be able to work Independently using initiative to solve problems and plan and organise workloads.			X
	Act with integrity, and be respectful of others, honest and reliable.			X
	Deliver a professional service to all customers			X
B4	Continually developing personally and professionally following current legislative and industry regulations and guidelines			X

## Appendix B: Grading

### Component 1

Apprentices must complete all three practical components without accruing any critical faults (CF), as outlined below. Apprentices may accrue up to and including 3 non-critical faults (F).

	<b>Fail</b> <ul style="list-style-type: none"> <li>• 1 or more critical faults (CF)</li> <li>• 4 or more faults (F)</li> </ul>	<b>Pass</b> <ul style="list-style-type: none"> <li>• 0 critical faults (CF)</li> <li>• less than 4 faults (F)</li> <li>• all of the below criteria achieved</li> </ul>
<b>S1</b> <b>S2</b> <b>K7</b>	<p><b>PPE check:</b> Failed to check the PPE labels for manufacturer's date and serial number to cross reference against inspection regime <b>(CF)</b></p> <p>Failed to carry out a visual and tactile pre-use inspection on PPE <b>(CF)</b></p> <p>Failed to identify a faulty item of PPE <b>(CF)</b></p>	<p>Checked all PPE labels and dates and carried pre-use inspection check</p> <p>Checked, identified and removed faulty item from service following organisational procedures</p>
<b>S4</b>	<p><b>Risk assessment:</b> Risk assessment not carried out <b>(CF)</b></p> <p>Risk assessment not suitable and sufficient for the work activity <b>(F)</b></p>	Carried out a risk assessment which is suitable and sufficient for the work activity
<b>S5</b>	<p><b>Workplace signage:</b> No signing, guarding and/or exclusion zones in place <b>(CF)</b></p> <p>Signage, guarding and/or exclusion zones insufficient <b>(F)</b></p>	Safe work area established with correct signing, guarding and exclusion zones in place
<b>S1</b> <b>S2</b> <b>S12</b> <b>S13</b> <b>S14</b> <b>B1</b>	<p><b>Safely work at height and apply the correct climbing techniques:</b></p> <p>Failed to be permanently attached at all times whilst climbing <b>(CF)</b></p> <p>Karabiner or associated fixing incorrectly used <b>(CF)</b></p> <p>Failed to maintain the correct fall factor of 1 whilst climbing <b>(F)</b></p> <p>Failed to use a work restraint when working within 2 meters of an unprotected rooftop edge <b>(CF)</b></p> <p>Improper use of work restraint <b>(CF)</b></p> <p>Failed identify the difference between fall arrest and work restraint <b>(F)</b></p>	<p>Demonstrated safe and satisfactory climbing techniques on a tower or mast, monopole and rooftop</p> <p>Correct work restraints identified, selected and used according to manufacturer's instructions</p> <p>Tools and equipment securely tethered throughout the assessment</p>

	Failed to understand the correct method to climb a monopole <b>(F)</b>  Failed to tether tools and equipment <b>(CF)</b>	
<b>S1</b> <b>S2</b> <b>S12</b> <b>S13</b> <b>S14</b> <b>B1</b>	<b>Correctly use fall arrest systems:</b>  Failed to check the fall arrest system certification <b>(F)</b>  Failed to identify the fall arrest device <b>(F)</b>  Incorrect fitting of a fall arrest system <b>(CF)</b>	Safely and correctly demonstrated application and use of the following fall arrest systems <ul style="list-style-type: none"> <li>• Latchway System</li> <li>• Metreel System</li> <li>• Railok System</li> </ul>
<b>S1</b> <b>S2</b> <b>S11</b> <b>S12</b> <b>S13</b> <b>S14</b> <b>B1</b>	<b>Correctly select safe and suitable anchor points:</b>  Failed to attach to suitable anchor point <b>(CF)</b>	Selected and attached to safe and suitable anchor points
<b>S1</b> <b>S2</b> <b>S14</b> <b>S15</b> <b>S16</b> <b>B1</b>	<b>Perform rescue at height using snatch and assisted lower techniques:</b>  Failed to carry out a function check before disconnecting from fall arrest lanyards <b>(CF)</b>  Failed to attach to the casualty <b>(CF)</b>  Failed to attach to the casualty at the correct height and attachment point <b>(CF)</b>  Failed to create a secondary friction point <b>(F)</b>  Failed to demonstrate secondary back up attachment <b>(F)</b>	Safely carried out a snatch and assisted lower rescue on a casualty employing correct attachments points using a secondary back up attachment and friction point
<b>S1</b> <b>S6</b> <b>B1</b>	<b>Deliver first aid:</b>  Failed to follow the procedures for calling for assistance (emergency services network) <b>(CF)</b>  Failed to identify the injury and apply preservation of life treatment <b>(CF)</b>	Followed the procedures for calling for assistance (emergency services network)  Identified the injury and applied preservation of life treatment to a casualty
<b>S18</b> <b>K21</b> <b>K23</b> <b>S20</b>	<b>Verbal and non-verbal signs and signals:</b>  Failed to effectively communicate using signs and signals throughout the assessment <b>(F)</b>	Effectively communicated using verbal and non-verbal signs and signals throughout the assessment

## Component 2

	<b>Fail</b> <ul style="list-style-type: none"> <li>• 1 or more critical faults (CF)</li> <li>• 4 or more faults (F)</li> </ul>	<b>Pass</b> <ul style="list-style-type: none"> <li>• 0 critical faults (CF)</li> <li>• less than 4 faults (F)</li> <li>• all of the below criteria achieved</li> </ul>
<b>S1</b> <b>S2</b> <b>K7</b>	<b>PPE check:</b> Failed to check the PPE labels for manufacturer's date and serial number to cross reference against inspection regime <b>(CF)</b>  Failed to carry out a visual and tactile pre-use inspection on PPE <b>(CF)</b>  Failed to identify a faulty item of PPE <b>(CF)</b>	Checked all PPE labels and dates and carried pre-use inspection check  Checked, identified and removed faulty item from service following organisational procedures
<b>S4</b>	<b>Risk assessment:</b> Risk assessment not carried out <b>(CF)</b>  Risk assessment not suitable and sufficient for the work activity <b>(F)</b>	Carried out a risk assessment which is suitable and sufficient for the work activity
<b>S5</b>	<b>Workplace signage:</b> No signing, guarding and/or exclusion zones in place <b>(CF)</b>  Signage, guarding and/or exclusion zones insufficient <b>(F)</b>	Safe work area established with correct signing, guarding and exclusion zones in place
<b>S1</b> <b>S2</b> <b>S14</b> <b>B1</b>	<b>Correctly select and use appropriate tools and equipment when working at height:</b>  Failed to use the correct tools for the task <b>(F)</b>  Failed to demonstrate tool and equipment tethering <b>(CF)</b>  Failed to identify calibrated equipment <b>(F)</b>  Failed to tether tools and equipment <b>(CF)</b>	Correctly selected and used the appropriate tools and equipment during the working at height activities  Tools and equipment securely tethered throughout the assessment
<b>K20</b> <b>S1</b> <b>S2</b> <b>S14</b> <b>B1</b> <b>B4</b>	<b>Safely select slings, shackles and associated lifting equipment maintaining safe working loads (SWL) and working load limit (WLL):</b>  Failed to select the SWL/WLL of lifting equipment <b>(CF)</b>  Failed to check lifting equipment inspection records <b>(CF)</b>  Failed to identify the load type <b>(CF)</b>	Correctly checked and selected slings, shackles and associated lifting equipment maintaining safe working loads (SWL) and working load limits (WLL)



<b>K20</b> <b>S1</b> <b>S2</b> <b>S14</b> <b>B1</b> <b>B4</b>	<b>Correct installation of lifting equipment:</b> Failed to identify and select a suitable anchor point <b>(CF)</b> Failed to identify lifting route <b>(F)</b>	Selected and attached to safe and suitable anchor points  Correctly installed ropes and pulleys in relation to structure type and equipment loads
<b>K20</b> <b>S11</b> <b>B1</b> <b>B4</b>	<b>Carry out the safe application of knots:</b> Failed to tie a knot correctly <b>(CF)</b> Incorrect selection of knot for the task <b>(CF)</b>	Selected a suitable knot for the task  Tied and dressed the knot correctly and checked secured to load
<b>K20</b> <b>S1</b> <b>S2</b> <b>S11</b> <b>B1</b> <b>B4</b>	<b>Safely lift and lower a load:</b> Failed to identify the requirements for a backup device <b>(F)</b> Failed to carry out test lift <b>(F)</b> Failed to carry out a safe, controlled lift and/or lower of a load <b>(CF)</b>	Carried out a test lift and made any necessary adjustments  Demonstrated a safe, secure lift and lower of a load
<b>S18</b> <b>K21</b>	<b>Verbal and non-verbal signs and signals:</b> Failed to effectively communicate using equipment, signs and signals throughout the assessment <b>(F)</b>	Effectively communicated using verbal and non-verbal signs and signals throughout the assessment

### Component 3

	<b>Fail</b> <ul style="list-style-type: none"> <li>• 1 or more critical faults (CF)</li> <li>• 4 or more faults (F)</li> </ul>	<b>Pass</b> <ul style="list-style-type: none"> <li>• 0 major fault (CF)</li> <li>• less than 4 faults (F)</li> <li>• all of the below criteria achieved</li> </ul>
<b>S1</b> <b>S2</b> <b>K7</b>	<b>PPE check:</b> Failed to check the PPE labels for manufacturer's date and serial number to cross reference against inspection regime <b>(CF)</b>  Failed to carry out a visual and tactile pre-use inspection on PPE <b>(CF)</b>  Failed to identify a faulty item of PPE <b>(CF)</b>	Checked all PPE labels and dates and carried pre-use inspection check  Checked, identified and removed faulty item from service following organisational procedures
<b>S4</b>	<b>Risk assessment:</b> Risk assessment not carried out <b>(CF)</b>  Risk assessment not suitable and sufficient for the work activity <b>(F)</b>	Carried out a risk assessment which is suitable and sufficient for the work activity
<b>S5</b>	<b>Workplace signage:</b> No signing, guarding and/or exclusion zones in place <b>(CF)</b>  Signage, guarding and/or exclusion zones insufficient <b>(F)</b>	Safe work area established with correct signing, guarding and exclusion zones in place
<b>S1</b> <b>S10</b> <b>B1</b>	<b>Read, interpret and work to technical drawings and designs:</b>  Failed to read, interpret and follow the design/drawing <b>(CF)</b>	Accurately carried an installation following a technical design and/or drawing
<b>S1</b> <b>S2</b> <b>S8</b> <b>B1</b>	<b>Carry out antenna alignment</b>  Failed to correctly align antenna <b>(CF)</b>  Failed to carry out the mechanical/electrical tilt <b>(F)</b>	Carried out correct GPS alignment of antenna as per radio planner's specification to include azimuth, mechanical and electrical
<b>S1</b> <b>S2</b> <b>S7</b> <b>S8</b> <b>B1</b>	<b>Correctly select antenna in relation to feeder and technology</b>  Failed to select the correct antenna technology <b>(CF)</b>  Failed to identify the correct feeder technology <b>(CF)</b>	Selected correct antenna and feeder for the technology/frequency  Demonstrated an understanding of, and explained the differences between 2G, 3G, 4G
<b>S1</b>	<b>Carry out connector terminations:</b>  Connector not fitted correctly <b>(CF)</b>	Accurately carried out a connector termination as per manufactures guidance

<b>S2</b> <b>S7</b> <b>B1</b>	Connector not tightened up correctly <b>(F)</b> Unable to terminate a connector <b>(CF)</b>	Identified the difference between 7/16 Din against a 43:10 connector
<b>S1</b> <b>S2</b> <b>S9</b> <b>B1</b>	<b>Carry out feeder testing (correct selection of open/short loads)</b> Calibration carried out incorrectly <b>(CF)</b> Incorrect choice of open/short load <b>(F)</b> Testing at the wrong frequency <b>(F)</b>	Demonstrated an understanding of open/short load in comparison to the client test specification and carried out a test

## Component 4 – Professional Discussion

	<b>Fail</b>	<b>Pass</b>	<b>Distinction</b>
		<ul style="list-style-type: none"> <li>all of the below criteria achieved</li> </ul>	<ul style="list-style-type: none"> <li>all of the pass criteria achieved</li> <li>4 of the 6 criteria below achieved</li> </ul>
<b>K3</b> <b>K4</b>	Fails to meet the pass criteria	Explains the importance of health and safety in the working environment, their personal site responsibilities and how to deal with hazards.	Explains the benefits of mitigating health and safety risks to the individual as well as the business.
<b>K6</b> <b>B1</b> <b>B2</b> <b>B3</b> <b>S3</b>	Fails to meet the pass criteria	<p>Identifies and challenges unsafe working conditions and practices.</p> <p>Explains organisational accident reporting and security processes and procedures providing examples of when they have followed them.</p> <p>Explains how to respond to problems and emergencies. provide solutions and gives examples of when they have reported unsafe practices.</p> <p>Discusses own responsibilities as well as when to pass on to senior colleagues.</p> <p>Acts professionally, with integrity and works reliably.</p> <p>Plans and organises own work load to work independently and solve problems as necessary.</p>	<p>Evaluates working practices and can describe how they impact themselves, the employer, members of the public, and external stakeholders.</p> <p>Explains potential consequences of security breaches on individuals and on the business.</p> <p>Acts as a good role model for others by educating others on the importance of safe working practices.</p>
<b>K11</b> <b>K13</b>	Fails to meet the pass criteria	<p>Explains different Network Operators testing requirements when carrying out an installation.</p> <p>Understands the difference in the type, size and weight of the key components of the wireless telecom site.</p>	<p>Describes how an incorrect installation negatively impacts on a Network Operator and the subsequent implications that are placed on the business.</p> <p>Explains why wireless telecom sites have different key components.</p>

		Interprets site schematic drawings and radio design scopes.	Identifies instances when they have contributed to the improvement or upgrade of site schematic drawings and radio design scopes.
<b>K20</b>	Fails to meet the pass criteria	Can identify different knot types used for slinging, lifting and lowering a load.	Demonstrate the process of arranging the knot to improve its performance (dressing) and reduce its jamming potential
<b>K22 K23 S17 K21</b>	Fails to meet the pass criteria	Explains the importance of effective communication and the need for positive working relationships, providing appropriate examples of stakeholder communication using verbal and non-verbal methods.  Gives examples of work completed to specification.	Explains how their actions are a representation of the company.  Explains how they promote the core values of the business.  Explains how they have proactively shared information and good practice.  Gives examples of applying strategies when in situations where assertive communication is required.
<b>B2 B4</b>	Fails to meet the pass criteria	Evidences a willingness to learn, continuous development and up-to-date knowledge by discussing current industry guidelines and regulations. Provide examples of liaising with stakeholders to ensure this has been achieved.	Identifies a clear occupational progression pathway and contributes to a personal development plan that goes beyond the apprenticeship.