



ENERGY &  
UTILITY SKILLS

Skills for a greener world

# Supporting Documents for

Level 3

Power Network Craftsperson

QAN 603/7291/6

# Supporting Documents for Level 3 Power Network Craftsperson

**QAN 603/7291/6**

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## Updates to the supporting documents

Since the first publication of the EUIAS Power Network Craftsperson (PNC) supporting documents, the following updates have been made.

Version	Date first published	Section updated	Page(s)
V 3.0	May 2023	Rebranded	All
V 2.0	February 2023	First published	All
V1.0	February 2022	Published with PNC Specification and as resources on EUIAS EPA resources web page	

## Appendix A: Glossary

**Amplification** – provides more detail on how individual knowledge, skills or behaviours statements should be interpreted. Where the KSB statements, themselves are deemed self-explanatory, no amplification is provided. Assessment may include questions on anything identified in the amplification

**Behaviours (as part of KSBs)** – specific mindsets, attitudes or approaches identified as part of the apprenticeship standard that must be evidenced during end-point assessment

**Elements** – are the knowledge, skills and behaviours and what is needed to competently undertake the duties required for an occupational standard

**Guidance** – is only provided where it is required to support interpretation of the KSB statements

**Gateway** - the stage of the apprenticeship where the apprentice, employer and trainer determine whether the apprentice is ready to undertake the end-point assessment

**Knowledge (as part of KSBs)** – specific information, technical detail, and ‘know-how’ identified as part of the apprenticeship standard that must be evidenced during end-point assessment

**Options/Pathways** – a specialist route within an occupational standard that builds on the occupational competence for a new entrant to the occupation

**Skills (as part of KSBs)** – the practical application of knowledge identified as part of the apprenticeship standard that must be evidenced during end-point assessment

**Standard** – An occupational standard is a description of an occupation. It contains occupational profile, and describes KSBs needed for someone to be competent in the occupation’s duties. Occupational standards are developed by employers for occupations that meet the Institute’s current occupation criteria

**Topic** - is a collection of elements grouped into a theme e.g., Health and Safety

## Appendix B: Gateway Eligibility Form

(Standard Version: ST0156 version 1; Assessment Plan Version: AP03)

Apprentice's name:	Apprentice's job title:
Name of Employer:	Name of Training provider:
Employer representatives present:	Training provider representatives present:
Apprenticeship start date:	Apprenticeship on-programme end date:
Gateway meeting date:	
Has the apprentice taken any part of the end-point assessment for this apprenticeship standard with any other End Point Assessment Organisation?	Y / N
If "Yes" please give details:	

### Apprentice's details

Eligibility requirements:

The apprentice must confirm their achievement of the following:

Eligibility requirement	Achieved by the apprentice? Y/N	Evidence (Scans of certificates MUST be included)
Achieved English level 2		
Achieved maths level 2		

## Gateway Eligibility Declaration

The apprentice, the employer and the training provider must sign this form to confirm that they understand and agree to the following:

1. The apprentice has completed the required on-programme elements of the apprenticeship and is ready for end-point assessment with EUIAS.
2. The apprentice will only submit their own work as part of end-point assessment.
3. All parties agree that end-point assessment evidence may be recorded and stored by EUIAS for quality assurance purposes.
4. The apprentice has been on-programme for a minimum duration of 365 days.
5. The apprentice has achieved the mathematics and English requirements as detailed in this document.
6. EUIAS has been informed about any reasonable adjustment and/or special considerations requests.
7. The apprentice, if successful, gives permission for EUIAS to request the apprenticeship certificate from the ESFA who issue the certificate on behalf of the Secretary of State.
8. The apprentice has been directed to the EUIAS Appeals Policy and Complaints Policy.
9. The employer/training provider has given the EUIAS at least three months' notice of requesting this EPA for this apprentice.
10. If the Gateway Eligibility Report is not completed in full, meeting all requirements, and submitted to EUIAS, the end-point assessment cannot take place.

Signed on behalf of the employer (print name):	Signature:	Date:
Signed on behalf of the training provider (print name):	Signature:	Date:
Apprentice's name (print):	Signature:	Date:

EUIAS use only:	
EUIAS Sign off:	
Comments/actions:	

## Appendix C: Behaviour and Progress Report

<b>Apprentice name</b>		<b>Review date</b>	
<b>Reviewer name</b>		<b>Position</b>	
<b>Review location</b>			
<b>Activities undertaken during the review period:</b>			
1 = Risk Assessment    2 = Working with Others    3 = Interpersonal Skills 4 = Practical Knowledge    5 = Practical Skills    6 = Quality of Work			
<b>Assessment Score Summary</b>			

<b>Behaviour 1</b>	+	5	-	+	4	-	+	3	-	+	2	-	+	1	-
<b>H &amp; S and Risk Assessment</b>	Consistently demonstrates compliance with H&S requirements and identifies potential workplace hazards with suitable controls in place. Reassesses and adapts with changing conditions			Demonstrates a high level of awareness of H&S requirements and identifies workplace hazards with suitable controls in place			Demonstrates ability to follow minimum required H&S guidelines and carry out basic risk assessments			Needs some reminders to comply			Does not provide any evidence of compliance with H&S requirements or understanding of the need to carry out risk assessment		
<b>Assessment Justification</b>															
<i>Insert supplementary evidence, such as photographs, after the written justification.</i>															

<b>Behaviour 2</b>	+	5	-	+	4	-	+	3	-	+	2	-	+	1	-
<b>Working with Others</b>	Develops positive relationships with individuals to support specific issues			Effectively contributes to team success, and suggests valid ideas			Respects the needs and contribution of others both inside and outside of the team			Holds back from contributing to team success			Refers to working with others in negative terms and prefers to 'go it alone'		
<b>Assessment Justification</b>															
<i>Insert supplementary evidence, such as photographs, after the written justification.</i>															

<b>Behaviour 3</b>	+	5	-	+	4	-	+	3	-	+	2	-	+	1	-
<b>Interpersonal Skills</b>	Delivers as promised with a strong sense of time and delivery			Speaks confidently when asked, listens to others and takes required action			Adapts the method and style of communications to changing circumstances and needs			Tends to 'stand back' and tries to avoid situations where communication skills are required			Reacts without fully understanding what others are saying		
<b>Assessment Justification</b>															
<i>Insert supplementary evidence, such as photographs, after the written justification.</i>															

Behaviour 4	+	5	-	+	4	-	+	3	-	+	2	-	+	1	-
<b>Practical Knowledge</b>	Outstanding knowledge application; high level of interest			Demonstrates knowledge application well; good level of interest			Shows knowledge, requires some prompting and guidance			Has some knowledge, lacks confidence in application			Lacks knowledge, does not show interest in application		
<b>Assessment Justification</b>															
<i>Insert supplementary evidence, such as photographs, after the written justification.</i>															

Behaviour 5	+	5	-	+	4	-	+	3	-	+	2	-	+	1	-
<b>Practical Skills</b>	Shows outstanding ability to apply new skills in all aspects			Confidently applies new skills			Can apply new skills with occasional assistance			Demonstrable skills do not reflect all aspects of learning			Consistently does not demonstrate appropriate skills		
<b>Assessment Justification</b>															
<i>Insert supplementary evidence, such as photographs, after the written justification.</i>															

Behaviour 6	+	5	-	+	4	-	+	3	-	+	2	-	+	1	-
<b>Quality of Work</b>	Top quality, outstanding level of accuracy & finish			Accurate and well finished, rarely needing correction			Accuracy and finish acceptable, occasional correction			Accuracy and finish below standard, regular correction required			Excessive errors, needing to repeat work on a regular basis		
<b>Assessment Justification</b>															
<i>Insert supplementary evidence, such as photographs, after the written justification.</i>															

<b>Assessment Summary</b>	
<b>Assessor Signature</b>	<b>Date</b>
<b>Employer IQA Signature (where appropriate)</b>	<b>Date</b>



## Appendix D: Trade Test Planning

### Overhead Lines Distribution Trade Test

#### Assessment Planning

[Overhead-Lines-Distribution-Trade-Test-Assessment-Planning-Level-3-v3.0.pdf \(euias.co.uk\)](#)

#### Requirements

[Overhead-Lines-Distribution-Trade-Test-Assessment-Requirements-Level-3-v3.0.pdf \(euias.co.uk\)](#)

### Overhead Lines Transmission Trade Test

#### Assessment Planning

[Overhead-Lines-Transmission-Trade-Test-Assessment-Planning-Level-3-v3.0.pdf \(euias.co.uk\)](#)

#### Requirements

[Overhead-Lines-Transmission-Trade-Test-Assessment-Planning-Level-3-v3.0.pdf \(euias.co.uk\)](#)

### HV Cable Jointing Trade Test

#### Assessment Planning

[HV-Cable-Jointing-Trade-Test-Assessment-Planning-Level-3-v3.0.pdf \(euias.co.uk\)](#)

#### Requirements

[HV-Cable-Jointing-Trade-Test-Requirements-Level-3-v3.0.pdf \(euias.co.uk\)](#)

### LV Cable Jointing Trade Test

#### Assessment Planning

[LV-Cable-Jointing-Trade-Test-Assessment-Planning-Level-3-v3.0.pdf \(euias.co.uk\)](#)

#### Requirements

[LV-Cable-Jointing-Trade-Test-Requirements-Level-3-v3.0.pdf \(euias.co.uk\)](#)

### Substation Trade Test

#### Assessment Planning

[Substation-Trade-Test-Assessment-Planning-Level-3-v3.0.pdf \(euias.co.uk\)](#)

#### Requirements

[Substation-Trade-Test-Requirements-Level-3-v3.0.pdf \(euias.co.uk\)](#)

## Appendix E: Trade Test Mapping Summaries

### Overhead Lines: Trade Test Mapping Summary

#### Guidance

##### Delivery

- The assessment must be conducted in a controlled assessment location. This controlled assessment location can be on-site or in an environment that reflects the hazards and risks of a real time working environment. The assessment must be designed to meet the requirements of the Power Network Craftsperson Standard – Level 3
- The technical assessor conducting the assessment must remain in visual contact with the candidate throughout the trade test assessment
- It is permissible that apprentices being assessed may work within visual distance of each other simultaneously, but they should not be in a position whereby they are supporting or observing an apprentice complete an identical activity which they will then carry out.
- The technical assessor shall ask knowledge questions where competence is not confirmed through observation of natural performance and a record made of the event where relevant
- The questioning should be individualised for each apprentice and the task they are conducting.
- To prevent other apprentices from gaining an unfair advantage, wherever possible the same questions should not be routinely asked or asked where other apprentices can hear the questions being asked.

##### Questions

- The technical assessor shall ask knowledge questions where competence is not confirmed through observation of natural performance and a record made of the event where relevant

### Assessment Requirements

The assessment activity must take a holistic approach and assess a broad range of the skills, knowledge and behaviours developed over the period of the apprenticeship

All pathways	Document Reference
<b>Use verbal and written communication methods to plan and organise the range of resources required to carry out work, including the materials, tools and equipment</b>  <div style="text-align: right;">CS3 CS5 CS7 CS8</div>	
<b>Take responsibility for the communication, implementation and monitoring of all safety arrangements required by the activity</b>  <div style="text-align: right;">CS4 CS5 CS7</div>	
<b>Maintain a safe working environment throughout the duration of the assessment</b>  <div style="text-align: right;">CS1 CS4 CS7</div>	
<b>Carry out the receipt, transfer and/or clearance of an operational safety document and maintain and comply with the document's conditions and requirements</b>  <div style="text-align: right;">CTK6 CS5</div>	

Overhead Lines: Wood Pole	Document Reference
<p>The assessment must incorporate the use of manual wood pole access / egress equipment to work at height in positions in excess of 8 metres from ground level.</p> <p><b>Carry out all of the following:</b></p> <ul style="list-style-type: none"> <li>a) <b>The identification and implementation of safe access/egress procedures when working on wood pole overhead line plant and apparatus</b></li> <li>b) <b>The siting and setting of a wood pole structure and a wood pole stay anchor</b></li> <li>c) <b>The assembly and installation of overhead line steelwork, fittings and apparatus</b></li> <li>d) <b>The erection and termination of overhead line conductors at height</b></li> <li>e) <b>The connection of conductors using both tension and non-tension joints</b></li> </ul> <p style="text-align: right;">OL1 OL3 OL4 OL5 OL7 OL8</p>	
<p><b>Use specialised tools, techniques and equipment to carry out testing and live work on energised low voltage overhead line conductors and interpret the results gained (Low Voltage only)</b></p> <p style="text-align: right;">CS3</p>	

Overhead Lines: Steel Tower	Document Reference
<p>The assessment must incorporate the use of manual steel tower access/egress equipment to work at height in positions in excess of 10 metres from ground level</p> <p><b>Carry out all of the following:</b></p> <ul style="list-style-type: none"> <li>a) <b>The identification and implementation of safe access/egress procedures when working on steel tower overhead line plant and apparatus</b></li> <li>b) <b>The application and removal of conductor earthing devices at height</b></li> <li>c) <b>The installation/replacement of steel tower fittings</b></li> <li>d) <b>The replacement of both suspension and tension insulators</b></li> <li>e) <b>Use equipment to install and test tension and non-tension joints</b></li> </ul> <p style="text-align: right;">OL1 OL3 OL4 OL5 OL7 OL8</p>	

Employer Declaration	
This is to confirm that our Trade Test documentation maps to the Assessment Requirements as detailed above. A copy of the documentation has been provided for reference.	
Employer Name	
Contact Name:	
Job Title:	
Signature:	
Date:	

Office Use Only	
Copy Documentation Received	
Mapping References Confirmed	
Date	

<b>Comments</b>
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## Underground Cables: Trade Test Mapping Summary

### Guidance

#### Delivery

- The assessment must be conducted in a controlled assessment location. This controlled assessment location can be on-site or in an environment that reflects the hazards and risks of a real time working environment. The assessment must be designed to meet the requirements of the Power Network Craftsperson Standard – Level 3
- The technical assessor conducting the assessment must remain in visual contact with the candidate throughout the trade test assessment
- It is permissible that apprentices being assessed may work within visual distance of each other simultaneously, but they should not be in a position whereby they are supporting or observing an apprentice complete an identical activity which they will then carry out.
- The technical assessor shall ask knowledge questions where competence is not confirmed through observation of natural performance and a record made of the event where relevant
- The questioning should be individualised for each apprentice and the task they are conducting.
- To prevent other apprentices from gaining an unfair advantage, wherever possible the same questions should not be routinely asked or asked where other apprentices can hear the questions being asked.

#### Questions

- The technical assessor shall ask knowledge questions where competence is not confirmed through observation of natural performance and a record made of the event where relevant

### Assessment Requirements

The assessment activity must take a holistic approach and assess a broad range of the skills, knowledge and behaviours developed over the period of the apprenticeship

All pathways	Document Reference
<b>Use verbal and written communication methods to plan and organise the range of resources required to carry out work, including the materials, tools and equipment</b>  <div style="text-align: right;">CS3 CS5 CS7 CS8</div>	
<b>Take responsibility for the communication, implementation and monitoring of all safety arrangements required by the activity</b>  <div style="text-align: right;">CS4 CS5 CS7</div>	
<b>Maintain a safe working environment throughout the duration of the assessment</b>  <div style="text-align: right;">CS1 CS4 CS7</div>	
<b>Carry out the receipt, transfer and/or clearance of an operational safety document and maintain and comply with the document's conditions and requirements</b>  <div style="text-align: right;">CTK6 CS5</div>	

Underground Cables – High Voltage	Document Reference
<p>Carry out jointing techniques of both high voltage XLPE and PILC cables which are complex in nature</p> <ul style="list-style-type: none"> <li>a) Set up a cable spiking gun in accordance with operational requirements and safe working practices</li> <li>b) Use specialised tools and techniques on a high voltage network or section of high voltage cable</li> </ul> <p style="text-align: right;">UC1 UC3 UC5 UC6 UC8 UC9 CS3</p>	
Underground Cables – Low Voltage	Document Reference
<ul style="list-style-type: none"> <li>a) Carry out live jointing techniques of both mains and service cables including XLPE and mains Consac or PILC cables which are complex in nature</li> <li>b) Carry out low voltage electrical testing procedures and interpret the results gained</li> </ul> <p style="text-align: right;">UC1 UC3 UC5 UC6 UC8 UC9 CS3</p>	



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Employer Name	
Contact Name:	
Job Title:	
Signature:	
Date:	

Office Use Only	
Copy Documentation Received	
Mapping References Confirmed	
Date	

<b>Comments</b>
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## Substation Fitting: Trade Test Mapping Summary

### Guidance

#### Delivery

- The assessment must be conducted in a controlled assessment location. This controlled assessment location can be on-site or in an environment that reflects the hazards and risks of a real time working environment. The assessment must be designed to meet the requirements of the Power Network Craftsperson Standard – Level 3
- The technical assessor conducting the assessment must remain in visual contact with the candidate throughout the trade test assessment
- It is permissible that apprentices being assessed may work within visual distance of each other simultaneously, but they should not be in a position whereby they are supporting or observing an apprentice complete an identical activity which they will then carry out.
- The technical assessor shall ask knowledge questions where competence is not confirmed through observation of natural performance and a record made of the event where relevant
- The questioning should be individualised for each apprentice and the task they are conducting.
- To prevent other apprentices from gaining an unfair advantage, wherever possible the same questions should not be routinely asked or asked where other apprentices can hear the questions being asked.

#### Questions

- The technical assessor shall ask knowledge questions where competence is not confirmed through observation of natural performance and a record made of the event where relevant

### Assessment Requirements

The assessment activity must take a holistic approach and assess a broad range of the skills, knowledge and behaviours developed over the period of the apprenticeship

All pathways	Document Reference
<p><b>Use verbal and written communication methods to plan and organise the range of resources required to carry out work, including the materials, tools and equipment</b></p> <p style="text-align: right;">CS3 CS5 CS7 CS8</p>	
<p><b>Take responsibility for the communication, implementation and monitoring of all safety arrangements required by the activity</b></p> <p style="text-align: right;">CS4 CS5 CS7</p>	
<p><b>Maintain a safe working environment throughout the duration of the assessment</b></p> <p style="text-align: right;">CS1 CS4 CS7</p>	
<p><b>Carry out the receipt, transfer and/or clearance of an operational safety document and maintain and comply with the document's conditions and requirements</b></p> <p style="text-align: right;">CTK6 CS5</p>	

Substation Fitting	Document Reference
<p><b>Carry out all the following:</b></p> <ul style="list-style-type: none"> <li><b>a) The identification and safe access/egress procedures when working on substation equipment</b></li> <li><b>b) Conduct the inspection of substation apparatus</b></li> <li><b>c) The maintenance and/or installation of substation apparatus</b></li> <li><b>d) Use equipment to carry out the testing of substation apparatus</b></li> </ul> <p style="text-align: right;">SF1 SF2 SF3 SF4 SF5 SF6 SF7 SF9</p>	

Employer Declaration		Office Use Only	
This is to confirm that our Trade Test documentation maps to the Assessment Requirements as detailed above. A copy of the documentation has been provided for reference.			
Employer Name		Copy Documentation Received	
Contact Name:		Mapping References Confirmed	
Job Title:		Date	
Signature:			
Date:			

<b>Comments</b>
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## Appendix F: Technical Interview Mapping Summary

### Technical Interview Mapping Summary

Category	Document Reference(s)
<b>AR1: Comply with the current Health, Safety and Environmental legislation and regulations applicable to work in the power sector</b> CTK1 CTK5 CTK6 CS1 CS2 CS4 CS6 CS8 CS9 OL1 OL3 OL5 OL9	UC1 UC2 UC3 UC4 UC5 UC6 UC8 UC9 SF1 SF2 SF3 SF4 SF5 SF6 SF7 SF9
<b>AR2: Plan, organise and control a range of resources required to carry out work relative to their job role on an operational network</b> CS8 CS9 OL2 OL5 OL9	UC1 UC3 UC4 UC5 UC6 UC8 UC9 SF1 SF2 SF3 SF4 SF5 SF6 SF7 SF9
<b>AR3: Identify the hazards and control measures necessary to carry out work on an operational network</b> CS2 CS6 CS8 CS9 OL1 OL3 OL5 OL9	UC1 UC2 UC3 UC4 UC5 UC6 UC8 UC9 SF1 SF2 SF3 SF4 SF5 SF6 SF7 SF9
<b>AR4: Apply Company rules, policies and procedures as defined by the employer to carry out work relative to their job role on an operational network</b> CTK5 CTK6 CS1 CS2 CS4 CS6 CS8 CS9 OL1 OL3 OL5 OL9	UC1 UC2 UC3 UC4 UC5 UC6 UC8 UC9 SF1 SF2 SF3 SF4 SF5 SF6 SF7 SF9
<b>AR5: Carry out electrical testing procedures of plant, apparatus and equipment on an operational network and interpret the results of the tests conducted</b> CTK1 OL3	UC2 UC5 UC6 UC8 SF2 SF5 SF9

Category	Document Reference(s)
<b>AR6: Use and apply relevant electrical theories and electrical/mechanical principles in the practical application of work processes and procedures related to their job role</b>	
CTK2 CTK3 OL3 OL4 <span style="margin-left: 150px;">UC3 UC4 UC5 UC6 UC8</span> <span style="margin-left: 150px;">SF2 SF4 SF5 SF6 SF9</span>	
<b>AR7: Use and apply mathematical calculations to support power engineering design, construction and maintenance activities related to their job role</b>	
CTK4 OL4 <span style="margin-left: 150px;">UC3 UC5 UC6</span> <span style="margin-left: 150px;">SF2 SF5</span>	
<b>AR8: Undertake the responsibilities and duties for the receipt, transfer and/or clearance of an operational safety document and maintain and comply with the documents conditions and requirements</b>	
CS5 CS6 CS9 OL9 <span style="margin-left: 150px;">UC3</span> <span style="margin-left: 150px;">SF9</span>	

Employer Declaration	
This is to confirm that our Technical Interview documentation maps to the Assessment Requirements as detailed above. A copy of the documentation has been provided for reference.	
Employer Name	
Contact Name:	
Job Title:	
Signature:	
Date:	

Office Use Only	
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Mapping References Confirmed	
Date	

Comments



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