ENERGY & ENVIRONMENT AWARDS

Skills for a greener world

EEA Level 3 End-point Assessment for Gas Network Craftsperson
(Network maintenance craftsperson: electrical and instrumentation; Network maintenance craftsperson: pressure management; Network pipelines maintenance craftsperson; Emergency response craftsperson)

Specification

QAN 610/6017/3
ST0205 V1.1 V1.2 V1.3

Specification for

EEA Level 3 End-point Assessment for Gas Network Craftsperson (All pathways)

QAN 610/6017/3

Updates to this specification 3

Section 1: At a Glance EPA Summary 4

- Objective 6
- Professional recognition 6
- Gateway Readiness 6
- Recognition of prior learning (RPL) 6

Section 2: End-point Assessment Components 8

- Component 1: Knowledge and Skills Assessment 8
- Component 2: Technical Interview – Session 1: Based on the practical task(s) .26
- Component 2: Technical Interview – Session 2: Based on the evidence in the logbook 62

Section 3: Grading and Grading Criteria 80

- Component 1: Knowledge and Skills Assessment 119
- Component 2: Technical Interview based on the logbook grading combinations 119
- Overall grading 119

Section 4: Resits and retakes 121

Section 5: Practical Guidance 122

- Gas Network Craftsperson Practical Observation and Planning Form 122
- Preparing for the Practical Observation 123
- Preparing for the Technical Interview 124
- Guidance on Logbook of Evidence 124
- Preparing for the Knowledge and Skills Assessment 128

Section 6: Authenticity and security of apprentice work 129

Updates to this specification

Since the first publication of Energy & Environment Awards Gas Network Craftsperson Specification – Network Maintenance Craftsperson; Electrical and Instrumentation; Emergency Response; Pipelines Maintenance and Pressure Management, the following updates have been made.

Version	Date first published	Section updated	Page(s)
v5.0	August 2025	Rebranded	All
v4.0	November 2024	Section 1: At a Glance	5
		Section 2: Technical Interview – Section 1	30
v3.0	August 2023	Rebranded, new template, amplification and guidance updated	All
v2.0	February 2022	New templates	All
v1.0	2017	First published	All

Section 1: At a Glance EPA Summary

Qualification name	EEA Level 3 End-point Assessment for Gas Network Craftsperson
Ofqual qualification number	610/6017/3
Standard reference	ST0205
Assessment plan	AP03
Standard title	Gas Networks Craftsperson
Pathways	Network maintenance craftsperson (electrical and instrumentation) Network maintenance craftsperson (pressure management) Network pipelines maintenance craftsperson Emergency response craftsperson
Level	3
Gateway pre-requisites submitted to Energy & Environment Awards	Apprentice has: • achieved a minimum Level 2 English and maths • if required an education, health and care plan or a legacy statement the apprenticeships English and mathematics minimum requirement is Entry Level 3 and British Sign Language qualification are an alternative to English qualifications for whom this is their primary language • compiled and submitted a logbook of evidence, which the technical interview will be based on
On-programme duration	Typically 48 months
Gateway readiness	Apprentice has met all Gateway pre-requisites. Employer completes, signs, and submits Gateway Eligibility Form (GER) form to Energy & Environment Awards. See Appendix B, GNC Supporting Documents 'Gateway Eligibility Form.'
End-point assessment duration	Typically 6 months after the Gateway

End-point assessment methods and their order	The assessments must be taken in this order (the knowledge and skills assessment must be successfully completed before the technical interview): • Knowledge and skills assessment • Technical interview (based on logbook of evidence)
End-point assessment methods and component grading	Knowledge and skills assessment: Fail; Pass; or Distinction Technical Interview based on the logbook: Fail; Pass or Distinction
Overall Grading	Fail; Pass or Distinction
Certification	Energy & Environment Awards request Apprenticeship completion certificates from the ESFA
Gas Safe Registration	Apprentices successfully completing the emergency response craftsperson option will need to obtain Gas Safe Registration **after completing the apprenticeship standard**, in order to practice as an emergency response craftsperson
Glossary of Terms	Appendix A, GNC Supporting Documents

Objective

The purpose of the Gas Network Craftsperson (GNC) end-point assessment (EPA) is to confirm that an apprentice is fully capable of doing their job before they receive their apprenticeship certificate. It also helps to demonstrate that what an apprentice has learned can be applied in the real world.

Once the apprentice has completed the GNC end-point assessment requirements successfully and has been certified they could take on the following job roles:

- Network maintenance craftsperson (electrical and instrumentation)
- Network maintenance craftsperson (pressure management)
- Network pipelines maintenance craftsperson
- Emergency response craftsperson

Professional recognition

The apprenticeship standard meets the professional standards of the Engineering Council for registration as Engineering Technician (Eng Tech) with the Institution of Gas Engineers and Managers (IGEM).

Gateway Readiness

The employer must be satisfied that the apprentice is consistently working at, or above, the level of the occupational standard. Gateway pre-requisites are listed in the summary table above.

Recognition of prior learning (RPL)

Energy & Environment Awards does not recognise any apprentice prior learning (RPL) or prior achievement (RPA) for the purpose of amending the assessment requirements of any end-point assessments.

Please refer to Energy & Environment Awards RPL and RPA policy at https://energyenvironmentawards.co.uk/policies-and-fees/

In order for Energy & Environment Awards to award an end-point assessment qualification, the apprentice must successfully complete all required assessment components with Energy & Environment Awards. This means that:

- each of the EPA components must be completed in full with Energy & Environment Awards
- where an apprentice transfers to Energy & Environment Awards from another EPAO they have to undertake the entire EPA with Energy & Environment Awards
- components of the EPA cannot be certificated in isolation
- evidence produced for the logbook must be related to the time the apprentice is on their apprenticeship programme to demonstrate current practice
- examples used by the apprentice, during the interview, must relate to the time they were on their apprenticeship programme

This does not affect the Gateway requirements which must be met in order for an apprentice to be eligible for end-point assessment.

This does not affect any reasonable adjustments that may be granted.

Section 2: End-point Assessment Components

Component 1: Knowledge and Skills Assessment

Overview

The knowledge and skills assessment is a multiple-choice test and is paper based. Apprentices have 1 hour 15 minutes to complete the test. It consists of 50 multiple-choice questions.

The multiple-choice questions will have four possible answers of which one will be correct.

The Pass mark is 35 correct answers.
The Distinction mark is 45 correct answers.

For this paper:

- a scientific calculator (non-programmable) is required
- access to the internet or intranet is NOT allowed
- apprentices cannot refer to any other material

Apprentices must take the test in a quiet space, free from distractions and influence, in the presence of an invigilator.

Knowledge and Skills Test Coverage

The knowledge and skills test consists of 50 core and pathway knowledge and skills questions.
The table below lists each of the knowledge and skills elements, assessed in the knowledge and skills assessment.
Amplification and Guidance can be found in the table below.

Number of Questions	Knowledge and Skills	Amplification and Guidance (where required)
2 - 3	**K2:** The requirements of the Gas Safety (Management) Regulations as relevant to their role, this being supported through company specific procedures involved in the practical installation and maintenance of gas network assets	• Explain the purpose, relevance, and application of GSMR • Describe how this is supported through company specific procedures
6 - 9	**K3:** The requirements of Health and safety standards and regulations, and environmental and regulatory requirements, including; The Health and Safety at Work Act, the Environmental Protection Act Dangerous Substances Explosive Atmospheres Regulations, The ATEX Directives, The Management of Health and Safety regulations, PUWER, Working at Height Regulations, Confined spaces Regulations, COSHH, PPE Regulations, RIDDOR, Noise at	• Demonstrate an understanding of the stipulated health and safety legislation and regulations • Explain the application of the stipulated health and safety legislation and regulations for the safety of yourself, colleagues, and others

Number of Questions	Knowledge and Skills	Amplification and Guidance (where required)
	work regulations, Control of Asbestos regulations and the Manual Handling Operations Regulations	
5 - 8	**K5:** Gas engineering and mechanical and /or electric principles and processes that underpin the location, diagnosis and rectification of faults	• Explain basic engineering theories, including the effects of pressure, temperature and volume • Explain the application of theory to the way in which equipment functions • Describe the application of theory to identify and rectify faults
4 - 7	**S12:** Through risk assessment, minimise risks to life, property and the environment when undertaking work activities	• Demonstrate the application of risk assessment processes and application of company specific procedures • Correctly identify hazards and risks • Correctly identify and implement appropriate safety actions • Correctly use documentation and record findings on site

Specialist Knowledge: Network maintenance craftsperson (electrical and instrumentation)		Amplification and Guidance (where required)
4 - 6	**NMCEi16** The safety processes to be applied when testing for voltages across the range likely to be encountered	• Explain the voltages associated with types of work and equipment • Describe the safety measures to be adopted • Explain the regulations and procedures applicable to electrical work
6 - 9	**NMCEi21** Understand how to safely apply diagnostic fault-finding principles to electrical systems	• Explain the purpose of components, how they work and the interaction between various components Describe the common failure or fault modes of components • Describe approaches to be taken to identify faults on various types of equipment • Describe the interpretation of test results to identify and resolve faults
4 - 6	**NMCEi23** Legislative requirements affecting electrical works and be able to describe how such legislation may affect them	• State legislation and regulations applicable to electrical work and their scope • Explain the appropriate application of legislation

Specialist Knowledge: Network maintenance craftsperson (electrical and instrumentation)		Amplification and Guidance (where required)
4 - 6	**NMCEi24** The hazards that could be encountered when maintaining both fixed and portable electrical equipment	• Explain the potential hazards of electrical equipment and their implications • Describe measures to mitigate hazards
4 - 6	**NMCEi25** Understand why safe isolation procedures must be followed when carrying out electrical or instrumentation operations	• Explain the reasons and requirements for safe isolation • Describe safe isolation procedures • Demonstrate the application of electrical theory • Demonstrate application of relevant procedures and permits to work

Specialist Knowledge and Skills: Network maintenance craftsperson (pressure management)		Amplification and Guidance (where required)
2 - 4	**NMCPM4** Undertake corrosion inspection activities	
1 - 3	**NMCPM16** Locate and avoid underground plant and equipment prior to and whilst undertaking activities	• State the risks posed by buried plant and equipment • Describe the correct use of plant detection equipment, including pre-use checks • Describe the actions to be taken when underground plant is detected
1 – 3	**NMCPM17** Install signing, lighting and guarding systems	• Explain the role and purpose of components of signing, lighting and guarding systems • State the standard to which signing, lighting and guarding systems should be installed
4 – 6	**NMCPM18** Understand how to apply diagnostic fault finding procedures to pressure control equipment	• Know how to identify the cause and consequences of faults of pressure control equipment • Know how and when to apply fault-finding techniques

Specialist Knowledge and Skills: Network maintenance craftsperson (pressure management)		Amplification and Guidance (where required)
		• Know how to interpret the results of diagnostic techniques
3 - 5	**NMCPM19** Understand how to operate the systems and processes used for remote pressure monitoring & control of the gas network	• Know the operational principles underpinning remote pressure monitoring and control systems • Know the role played by individual component parts of pressure monitoring and control systems • Explain how network pressures are managed through the use of remote pressure monitoring and control systems • Explain the consequences of failure of remote pressure monitoring and control systems
2 - 4	**NMCPM20** Understand the permitry requirements when maintaining or configuring pressure control equipment	• Explain the purpose of permits to control operations • Explain when permits are required for work on pressure control equipment • Know how to comply with permit requirements

Specialist Knowledge and Skills: Network maintenance craftsperson (pressure management)		Amplification and Guidance (where required)
2 - 4	**NMCPM21** Understand the company specific and legislative requirements for the inspection and monitoring of mechanical pressure control systems and equipment	• State the legislation, regulations and procedures relevant to pressures within the gas transportation network • Know how to apply the requirements of procedures when undertaking work on pressure control systems and equipment
2 - 4	**NMCPM22** The requirements for corrosion inspection activities in line with the requirements of both the pressure systems safety regulations and pipeline safety regulations	• Explain the requirements of regulations in managing corrosion on the gas supply network • Know the causes and potential consequences of corrosion of pipelines and pipework in the gas supply network • Describe methods used for preventing corrosion • Describe methods used for monitoring corrosion on the gas supply network
3 – 5	**NMCPM23** The hazards associated with working on systems that contain pressurised gas	• Know the potential risks to self and others posed by gas under pressure • Know the potential risks to operational equipment posed by gas under pressure

Specialist Knowledge and Skills: Network maintenance craftsperson (pressure management)		Amplification and Guidance (where required)
		• Describe ways of reducing the level of risk when working on pressurised systems
3 – 5	**NMCPM24** The security of gas supply implications when undertaking pressure control work operations	• Explain what is meant by the term 'security of supply' • Explain how work on pressure control systems can potentially impact security of supply • Know how to undertake work on the gas supply network to minimise the risk of supply incident
2 – 4	**NMCPM25** The implications of the pressure systems safety regulations when assessing the suitability of equipment to be used	• Know the requirements of the Pressure Systems Safety Regulations 2000 (PSSR) with respect to the suitability of equipment to be used on the gas supply network • Describe the potential consequences of using equipment which is not of the required standard

Specialist Knowledge and Skills: Network maintenance craftsperson (pressure management)		Amplification and Guidance (where required)
1 - 3	**NMCPM27** The New Roads and Street Works Act requirements for the provision of signing, lighting, and guarding when working in or adjacent to the public highways	• Know the requirements for maintaining access routes for pedestrians on the highway • Know the requirements for maintaining access routes for vehicles on the highway • Explain the requirements for maintaining a safe area in which to work on the highway

Specialist Knowledge and Skills: Network pipelines maintenance craftsperson		Amplification and Guidance (where required)
1 - 3	**NPMC7** Liaise with relevant landowners and third parties e.g., statutory agencies and members of the public	
1 – 3	**NPMC12** Locate and avoid underground plant and equipment prior to and whilst undertaking activities	
1 – 3	**NPMC13** Install signing, lighting and guarding systems	
1 – 3	**NPMC14** Liaise with emergency services and other statutory authorities as necessary	
1 – 3	**NPMC16** Respond to reported pipeline gas emergencies	
2 – 4	**NPMC17** The health and safety requirements when conducting operations on gas pipeline systems	
2 – 4	**NPMC18** Understand how to test and confirm the suitability and effectiveness of corrosion control measures	
3 – 5	**NPMC19** The requirements for the testing and inspection of pipelines in accordance with the	

Specialist Knowledge and Skills: Network pipelines maintenance craftsperson		Amplification and Guidance (where required)
	Pipeline safety and Pressure systems safety regulations	
2 – 4	**NPMC20** The permitry requirements when entering or working on gas operational sites	
2 – 4	**NPMC21** The company specific requirements for the inspection of pipeline systems and associated systems and equipment, including the frequency of such inspection	
2 – 4	**NPMC22** The implications of and assessment of damage sustained to pipelines by third party persons	
1 – 3	**NPMC23** The hazards and permitry requirements associated with working on or in proximity of pipelines that contain pressurised gas	
1 – 3	**NPMC24** The implications of the pressure systems safety regulations when assessing the suitability of equipment to be used	

Specialist Knowledge and Skills: Network pipelines maintenance craftsperson		Amplification and Guidance (where required)
1 – 3	**NPMC25** Understand how to apply company specific procedures when responding to reported pipeline gas emergencies	
2 – 4	**NPMC26** The New Roads and Street Works Act requirements for the provision of signing, lighting and guarding when working in or adjacent to the public highways	

Specialist Knowledge: Emergency response craftsperson		Amplification and Guidance
3 - 5	**NERC12** Locate and avoid underground plant and equipment whilst undertaking activities in the highway	• Demonstrate safe working practices to avoid the hazards posed by buried plant and the potential consequences of damage • Demonstrate care for the safety of yourself, colleagues, and others • Correctly select and use appropriate PPE • Correctly select and use equipment for the task, ensuring it is fit for purpose • Accurately locate and mark the location of buried plant
2 - 3	**NERC13** Liaise with emergency services and other statutory authorities as necessary	• Demonstrate care for the safety of yourself, colleagues, and others • Provide examples of liaising with statutory authorities e.g. Highways, Fire Service, Police, Ambulance, HSE (RIDDOR) • Accurately pass and receive information
6 - 9	**NERC15** The safety actions to be applied where critical gas level concentrations are encountered when dealing with reported gas emergencies	• State the priorities to follow when attending a gas escape • Explain the actions to be taken when attending a gas escape downstream of the Emergency Control Valve (ECV)

Specialist Knowledge: Emergency response craftsperson		Amplification and Guidance
		• Explain the actions to be taken when attending a gas escape upstream of the Emergency Control Valve (ECV) on the gas transportation network • State and explain critical gas concentration levels and the actions to be taken • State and explain the safety advice to be given to customers associated with a gas escape • State and the criteria for evacuation and reoccupation and the actions to be taken
2 - 3	**NERC16** The requirements of the Gas Safety (Management) Regulations when dealing with reported gas emergencies	• Describe the scope of GSMR • Explain how compliance with GSMR influences the required attendance time at reported gas escapes
6 - 9	**NERC17** The requirements of the relevant British standards in relation to the safe installation of gas appliances, pipework, and meters	• State the relevant British standards or company specific procedures to be followed with appliances, pipework and meters • Explain how to comply with the requirements of relevant standards and procedures • Describe the purpose of Gas Safe registration

Specialist Knowledge: Emergency response craftsperson		Amplification and Guidance
2 - 3	**NERC20** Understand how to recognise the signs and symptoms of suspected carbon monoxide poisoning	• Explain the potential risks posed by carbon monoxide • Explain the potential causes of carbon monoxide emissions • Describe the signs and symptoms associated with suspected carbon monoxide poisoning and actions to take
4 - 7	**NERC22** The New Roads and Street Works Act requirements for the provision of signing, lighting, and guarding when working in or adjacent to the public highways	• Explain the purpose and scope of the New Roads and Street Works Act • Describe the basic principles of signing, lighting and guarding • Explain the potential consequences of not adequately protecting work sites
3 - 5	**NERC23** Understand how to apply suitable control measures for the location and avoidance of supply apparatus and sub-structures prior to and whilst working on gas network assets	• Describe the types of utility apparatus likely to be underground and potential depths • Explain the risks associated with underground apparatus and the potential way in which it might be damaged and cause harm • Explain control measures to avoid damaging underground apparatus

Specialist Knowledge: Emergency response craftsperson		Amplification and Guidance
		• Describe how to identify the location of buried apparatus

Knowledge and Skills Assessment Roles and Responsibilities

Role	Responsibility
Invigilator	Is typically provided by the employer or training provider. Attend induction training as directed by Energy & Environment Awards.
Employer/Training Provider	Ensure that the knowledge test is scheduled with Energy & Environment Awards for a date and time which allow the apprentice to be well prepared.
Energy & Environment Awards	Arrange for the knowledge test to take place, in consultation with the employer/training provider. Mark knowledge test answers accurately according to the mark scheme and procedures.

Component 2: Technical Interview – Session 1: Based on the practical task(s)

Overview

The apprentices who have successfully completed the knowledge and skills assessment will move onto completing the technical interview. In order to complete technical interview session 1 the apprentice must have completed a practical task as session 1 of the interview will be based on the practical task.

The practical task should be one that is typically undertaken by a gas network craftsperson. In a practical observation, an employer assessor observes an apprentice completing a practical activity in a normal place of work or in a simulated environment that reflects the real working environment appropriate to the task(s) and risk involved. In the interest of safety, the systems used for the practical task purposes should be supplied with air and not fuel gas. The apprentice must be allowed to demonstrate the application of the relevant core and specific job role knowledge, skills and behaviours (KSBs) through naturally occurring evidence. In the role of:

- **The Network maintenance craftsperson (electrical and instrumentation):** This should be carried out on a **minimum of three** of the following types of instrumentation and control equipment:
    - Pressure such as absolute, gauge, vacuum
    - Flow such as orifice plate, venturi tube, ultrasonic
    - Level such as floats, displacer, differential pressure cells
    - Temperature such as thermocouples, resistance, infra-red, thermal imaging
    - Fiscal metering – Gas
    - Detection and alarm such as smoke, heat, gas
    - Recorders and indicators
    - Telemetry systems such as master station, outstation, stand-alone systems
    - Valves and valve mechanisms such as control valves and valve actuators

And/or

Electrical fault diagnosis and repair

This should be carried out on a **minimum of three** of the following types of electrical equipment:

- Single-phase power circuits
- Three-phase power circuits
- Direct current power circuits
- Switchgear and distribution panels
- Motors and starters
- Control systems and components
- Electrical plant
- Luminaires – Lighting

- **The Network maintenance craftsperson (pressure management) task**:
  This should be:
  - the installation of a below 7 bar single stream regulator system including all auxiliary controls and pipework
  - testing and commissioning of the installed single stream regulator system
  - completing functional checks on below 7bar twin stream regulator installations
  - completing functional checks on above 7bar twin stream regulator installations
  - the fault diagnosis and repair of a pressure control system including component exchange

- **The Network pipelines maintenance craftsperson task**:
  This should be **pipeline maintenance**:
  - installing cathodic protection equipment - to include sacrificial anode, connecting to a cable and test post ad commissioning
  - monitoring CP associated equipment to include SAC and impressed current systems
  - fault finding on SAC and impressed current CP schemes
  - monitoring of third party works in the vicinity of HP pipelines and associated equipment, to include walking, vantage and aerial surveys
  - inspecting pipeline coatings, including VSO2 inspection

- main line valve maintenance activities

Or

This should be **pipeline maintenance operations**:

- carrying out under pressure drilling
- demonstrating flow stopping techniques
- demonstrating pipeline fabrication and testing
- safe isolation, venting & purging of live gas pipelines
- complete online and in-line inspections
- undertake re-compression and valve repairs

- **The Emergency response craftsperson task**:
  This should be observed on:
  - upstream gas emergencies
  - downstream gas emergencies
  - safe and unsafe combustion of natural gas
  - installation and commissioning of medium pressure regulators
  - installation of domestic gas pipework and meters
  - tightness testing and purging of domestic natural gas installations
  - tightness testing and purging of non-domestic natural gas installations
  - application of the gas industry unsafe situations procedures

Centres unfamiliar with this standard are strongly recommended to use Energy & Environment Awards Practical Observation Review service to help ensure that the practical task provides the right evidence for the technical interview (session 1)

Step-by-Step Guide

The table below provides a step-by-step guide on how the Technical Interview – Session 1 will be carried out:

Assessors	**Practical Task:** 1 employer assessor, appointed by Energy & Environment Awards. • An employer assessor appointed by Energy & Environment Awards will observe and write a facutal account (facts, true details and extact examples observed watching you on the day) of the practical task **Technical Interview – Session 1 will focus on the practical task (post gateway evidence):** • 1 independent assessor appointed by Energy & Environment Awards will conduct your interview, in the presense of a techincal expert from your employer approved by Energy & Environment Awards and this may be the same person who observered the apprentice during their practical task • 1 employer assessor, appointed and approved by Energy & Environment Awards from the apprentice's employer or training provider is allowed to be present in the room whilst the technical interview is being conducted which would normally be the employer assessor who conducted the practical observation. The employer assessor: ○ **must not** amplify or clarify points made by the apprentice ○ role is to provide context for the independent assessor with clarifications around specific company policies and procedures • The technical interview will take place on a different day to your practical task

	• The practical task will be indirectly assessed during the technical interview
The practical task structure	The assessment time per pathway is no longer than: Network maintenance craftsperson (electrical & instrumentation) – 9 hours +/-10% Network maintenance craftsperson (pressure management) – 12 hours +/-10% Network pipelines maintenance craftsperson – 12 hours +/-10% Emergency response craftsperson - 12 hours +/-10% The assessment time can be split across a maximum of three days. The actual time allowed will be based on the comparable time that an industry competent worker would take to achieve successful task(s) completion. **IMPORTANT NOTE - For an Emergency Response Craftsperson Apprentice ONLY:** The apprentice successfully completing the Emergency Response Craftsperson pathway will need to obtain Gas Safe Registration after completing the apprenticeship standard, in order to practice as an Emergency Response Craftsperson. To satisfy the requirements of Gas Safe Registration, the Emergency response apprentice will need to successfully complete Matters of Gas Safety (MoGS) assessments. This assessment must be delivered through a certification body approved to deliver the Nationally Accredited Certification Scheme. This can be delivered by Energy & Environment Awards: • **If the apprentice is undertaking their Matters of Gas Safety (MOGS) assessments with Energy & Environment Awards to achieve their Gas Safe Certifications for** CESP1, REGT1, TPCP1a and MET4 then they must complete Practical Tasks 1,2,6,7 and 8 • **If the apprentice is NOT undertaking their MOGS assessment with Energy & Environment Awards** then they must only complete the following Practical Tasks**:** o Task 3 (NERC 7 & 18)

	○ Task 4 (NERC 10 & 21) ○ Task 5 (NERC 9) ○ Task 9 (NERC 2 & 16) **See pages 35-60 for the full list of KSBs to be covered in the practical task.** Apprentices are observed to confirm that they can apply their knowledge, skills, behaviours and role specific skills in an integrated way with minimum supervision. • 1 apprentice may be observed at one time • The technical interview must be completed within three-weeks of the practical task completion The practical task/observation will be: • administered and managed by an employer assessor • written up as a factual account by the employer assessor There may be breaks during the practical task/observation to allow the apprentice to move from one location to another and for meal/comfort breaks. During these breaks, the clock will be stopped and then restarted to ensure that the assessment duration is not reduced.
Where will the assessment take place?	The practical task/observation must be conducted: • in the apprentice's normal place of work in a suitable area provided the apprentice can work unhindered and without gaining advantage from others OR • In a simulated environment that reflects the real working environment and realistic work situation of a gas network craftsperson
What are the tasks that will be covered?	The assessment task must allow the apprentice to undertake the activities. For further details refer to **'Knowledge, Skills and Behaviours (KSBs) Coverage' below pages 35 - 60.** The practical task/observation must also allow the apprentice to demonstrate the behaviours listed in the next section.

Who sets the task(s)?	Employer or training provider set the task based on the guidance provided in this Specification. Centres unfamiliar with the GNC standard should use Energy & Environment Awards Practical Observation review Service to review proposed practical task(s) before end-point assessment takes place. The task must provide apprentices with the opportunity to achieve all the KSBs assessed in the Technical Interview – Session 1. Energy & Environment Awards will work with the employer and/or training provider to review the practical task briefs/job task sheets which are based on the activities described above. The apprentice must be provided with both written and verbal instructions by the employer assessor on the tasks.
What resources can the apprentice use?	Equipment and resources needed for the practical task must be: • provided by the employer or training provider • a suitable premises • the plant, machinery, equipment and PPE required for the job • in good and safe working condition Relevant work instructions/manuals must be available in hard copy or electronically.
Technical Interview (based on the practical task) structure	**Locations:** Employer's premises or a suitable venue for example a training provider's premises. **Time:** The technical interview session 1 will last for 1 hour and +/- 10% to allow the apprentice to finish the last answer. **The Technical Interview Session 1:** • **will only focus on the practical task** • once the interview is completed there will be a 15-20 minute break. The break must be supervised by an invigilator at all times • is a discussion between the apprentice and the independent assessor • is conducted by 1 independent assessor accompanied by the employer assessor, see 'Assessors' above • is face to face or remote, as agreed

	• is recorded in writing using the technical interview record template provided by Energy & Environment Awards • is video recorded using relevant technology such as Microsoft Teams or an audio recording device • is conducted under examination conditions The apprentice will have access to their logbook of evidence throughout the technical interview. **Logbook:** • The apprentice's Manager/Mentor will typically support the development of the evidence logbook in accordance with company policy and procedures • See 'Logbook of Evidence Requirements' guidance below on the content of evidence • The logbook must contain the **practical task factual account written by the employer assessor**
How many questions will the apprentice be asked during the technical interview session 1?	The Independent Assessor: • **during session 1** - will only focus on the apprentice's practical task (post-gateway evidence) and the independent assessor will ask a set of 10 open questions relating to the practical task, to confirm authenticity of their work and assess their KSBs relating to the task • Set questions which maybe contextualised to the contents of the apprentice's logbook • may ask follow-up questions in order to seek clarification
What will the questions focus on?	Underpinning knowledge and/or skills and behaviours where an opportunity to observe them has not occurred. For further details refer to **'Knowledge, Skills and Behaviours (KSBs) Coverage below pages 35 - 60.**
When will the logbook of evidence be referred to?	**The logbook of evidence**: • will be reviewed by the independent assessor before the technical interview

	• can be referred to by the apprentice to illustrate their answers **Note:** the logbook of evidence is not directly assessed.
Grading	Fail, Pass or Distinction.

Practical Task/Observation Knowledge, Skills and Behaviours (KSBs) coverage

The apprentice must demonstrate the following core KSBs and the role specific knowledge and skills in an integrated way. The practical task is supervised by the employer assessor approved by Energy & Environment Awards.

The practical task must be successfully completed before Session 1 of the technical interview which is purely based on the practical task.

The practical task/observation covers:

Practical Task/Observation: Core Skills	Amplification and Guidance (where required)
S1 Undertake and document risk assessments in accordance with company procedures	• Demonstrate knowledge of risk assessment processes • Correctly identify hazards and risks • Correctly identify and implement mitigation actions • Correctly use documentation • Undertake a site-specific risk assessment appropriate to the site and task • Identify and implement appropriate control measures
S2: Comply with workplace health, safety and environmental practices and regulations, maintaining a safe and secure working environment	• Correctly identify stakeholders who need to be informed of work being undertaken • Demonstrate understanding and application of safe working practices • Comply with health and safety measures specified for the site • Apply safe working practices in accordance with the risk assessment and Permit to Work requirements

Practical Task/Observation: Core Skills	Amplification and Guidance (where required)
S3: Follow engineering instructions and company procedures to complete tasks safely and on-time	• Demonstrate understanding and application of relevant procedures for the task • Undertake tasks in compliance with procedures
S4: Undertake inspection and examination of network assets in order to maintain the safe and compliant operation of the network to ensure the integrity, safety and security of supply	**The following is ONLY applicable to Electrical and Instrumentation; Pressure Management and Pipelines Maintenance pathways:** • Correctly apply procedures whilst undertaking work • Demonstrate the maintenance of network assets to ensure the safety and security of supply • Demonstrate the correct use of tools and testing equipment • Demonstrate understanding of the impact of components on safety and security of supply • Undertake visual inspection of equipment and component • Use equipment to check the function and operation of components • Examples of assets may include electrical equipment, telemetry equipment, control systems, sensing equipment, metering, actuators **The following is ONLY applicable to the Emergency Response Pathway:** • Correctly apply procedures whilst undertaking work

Practical Task/Observation: Core Skills	Amplification and Guidance (where required)
	• Demonstrate the isolation of meters and internal installations from network assets to ensure safety • Ensure the correct operation of emergency control valves • Demonstrate the correct use of tools and testing equipment • Demonstrate understanding of the impact of components on safety • Undertake visual inspection of equipment and components
S5: Maintain and/or install gas engineering assets, components and associated equipment	• Correctly install or maintain equipment, including pipework, meters, and pressure regulators • Demonstrate the correct and safe use of tools and equipment • Take action to check or confirm the performance of components • Correctly select and use tools and equipment appropriate for the task • Install new or replacement equipment of components appropriate for the task • Check or confirm the performance of new components • Assets may include electrical equipment, telemetry equipment, control systems, sensing equipment, metering
S6: Install, test, purge and commission gas network assets	• Correctly install or maintain equipment, including meters and regulators • Correctly apply tightness and functional test procedures

Practical Task/Observation: Core Skills	Amplification and Guidance (where required)
	• Demonstrate the correct application of purge and commissioning procedures • Identify tools, equipment and materials required for the task • Apply a safe and logical approach to the installation of assets • Confirm the newly installed assets are working correctly • Examples of assets and equipment may include gas quality equipment, meters, orifice plates, gauges, sensors, switches, solenoids, transducers, telemetry, actuators
S7: Operate powered tools, such as drills, angle grinders, brush cutters and shot blasting equipment as required for network maintenance operations	• Demonstrate the correct and safe use of powered tools and equipment • Identify power tools appropriate for the task • Ensure site rules and conditions are suitable for the use of power tools • Apply pre-use checks to ensure equipment is safe and fit for purpose • Use equipment in accordance with instructions • Examples of tools and equipment may include hand tools, hot work tools, meters, gauges, battery operated tools, electrical tools
S8: Use approved gas detection equipment to ensure safe environment	• Demonstrate the correct use of gas detection equipment • Correctly interpret outputs where gas readings are detected

Practical Task/Observation: Core Skills	Amplification and Guidance (where required)
	• Demonstrate the implementation of appropriate actions • Use equipment to detect for the presence of escaping gas before undertaking work • Examples of gas detection equipment may include: Gascoseeker, Gassurveyor, personal atmosphere monitor, sensors
S9: Use Personal Protective Equipment (PPE) and safety equipment in accordance with manufacturer's instructions and employer policy	• Demonstrate the correct wearing and use of PPE and safety equipment • Select, wear and use personal protective equipment appropriate to the site and task • Examples of PPE may include protection for: head, hearing, eyes, body, hands, feet • Examples of PPE may include protection from dust, heat, fire • Examples of PPE may include personal atmosphere monitor
S10: Obtain and analyse asset condition and performance information to facilitate decision making	• Correctly assess the condition and performance of equipment • Correctly interpret results and take appropriate actions • Use information supplied by others to confirm performance • Use test equipment to identify the performance of systems and components • Use available information to make decisions on the actions required

Practical Task/Observation: Core Skills	Amplification and Guidance (where required)
	• Examples of performance information may include inputs, outputs and telemetered data • Examples of conditions may include tolerances, accuracy and inaccuracy
S11: Identify, organise and use resources effectively to complete tasks, with consideration for cost, quality, safety, security and environmental impact	• Correctly identify the tools and equipment required • Correctly identify the materials required • Demonstrate appropriate safe working practices • Demonstrate the application of site security requirements • Demonstrate actions taken to care for the environment, including waste disposal • Demonstrate awareness of costs • Demonstrate task completion of an appropriate quality • Select the tools, equipment, materials and consumables appropriate for the task • Demonstrate care for tools, equipment, materials and consumables throughout the task • Demonstrate the correct use of tools, equipment, materials and consumables throughout the task • Take steps to minimise wastage • Examples of resources may include manpower, tools, equipment, materials, consumables

Practical Task/Observation: Core Skills	Amplification and Guidance (where required)
S13: Accurately record job information, complete job reports and process	• Demonstrate the use of company specific documentation, reporting systems and processes • Demonstrate the appropriate and accurate completion of documentation before, during and after work • Effectively interpret the outputs of test equipment • Maintain appropriate records of tests and outputs, as appropriate for the task • Inform others of results and outputs, as appropriate • Maintain site logs, as appropriate • Examples of information may include inputs, outputs, data, performance data • Examples of reports may include handwritten reports, computer records, site logs, verbal reports

Practical Task/Observation: Core Behaviours	Amplification and Guidance (where required)
B1: Display a self-disciplined, self-motivated approach	• Demonstrate ownership of and responsibility for own actions • Explain why self-discipline and self-motivation are important and give examples of how these have been applied
B3: Demonstrate and apply a safety first approach	• Demonstrate an understanding of health and safety issues • Demonstrate concern for safety for oneself, colleagues and others

Practical Task/Observation: Core Behaviours	Amplification and Guidance (where required)
	• Recognise the risks posed by the site and work to be undertaken • Apply safe working practices appropriate for the site and task
B4: Accept accountability when undertaking individual and team tasks	• Demonstrate ownership of work undertaken by oneself • Describe using examples when accountability has been taken for tasks
B5: Follows instruction from appropriate supervision, and makes decisions when required	• Recognise and accept levels of authority • Act upon instructions received • Make and take responsibility for own decisions • Describe the management/reporting structure and who can issue work instructions • Give examples of where instruction have been followed
B6: Quality-focussed and professional in work and in personal standards	• Recognise the need to act in a professional manner • Produce work to a required standard and in compliance with policies and procedures • Explain why it is important to produce quality work
B8: Accepts responsibility for work undertaken	• Demonstrate ownership of work undertaken by oneself • Give examples of when responsibility has been accepted for a task

Pathway: Network Maintenance Craftsperson - Electrical and Instrumentation Specialist Role Specific Skills	Amplification and Guidance (where required)
NMCEi1: Apply electrical theories and principles and use equipment to carry out diagnostic fault finding procedures	• Demonstration of applying the theories of diagnostics and fault identification and rectification • Correct application of appropriate fault-finding procedures
NMCEi2: Inspect, maintain, repair, overhaul test and calibrate instrumentation and control equipment and circuits in accordance with company procedures	• Demonstrate use of relevant company procedures • Correctly apply relevant procedures when carrying out work • Undertake work to the required outcome and quality • Demonstrate the correct selection and use of materials, tools and equipment • Demonstrate safe working practices, including appropriate use of PPE
NMCEi4: Carry out cable testing across a range of voltages to ensure safety and suitability for use	• Demonstrate taking measures to avoid the risks associated with electrical voltages • Demonstrate the use of cable testing equipment • Demonstrate the selection of appropriate cables and confirm their suitability for use
NMCEi5: Install, maintain and dismantle instruments, controllers, probes, attachments, cabling, meters and display units	• Demonstrate the use and application of relevant company procedures • Demonstrate how the installation and maintenance of a variety of electrical and instrumentation equipment • Undertake work to the required outcome and quality

Pathway: Network Maintenance Craftsperson - Electrical and Instrumentation Specialist Role Specific Skills	Amplification and Guidance (where required)
	• Demonstrate the correct selection and use of materials, tools and equipment • Demonstrate safe working practices, including the appropriate use of PPE
NMCEi9: Repair, maintain, configure and calibrate field instrumentation, communication devices and associated equipment used in system and process control	• Demonstrate the application of relevant procedures • Demonstrate the maintenance and calibration of communication systems such as alarms • Undertake work to the required outcome and quality • Demonstrate the correct selection and use of materials, tools and equipment • Demonstrate safe working practices, including appropriate use of PPE
NMCEi12: Carry out isolation procedures to ensure process or system stability and the safety of personnel when carrying out operations	• Demonstrate the process to be followed for safe isolation and system stability and the factors impacting this • Correctly apply relevant procedures when carrying out work
NMCEi15: Apply electrical knowledge and skills to install, maintain and dismantle a wide range of plant, machinery and components	• Demonstrate the application of electrical theory • Demonstrate application of relevant procedures and permits to work • Demonstrate the installation, maintenance and decommissioning of electrical and instrumentation equipment • Undertake work to the required outcome and quality

Pathway: Network Maintenance Craftsperson - Electrical and Instrumentation Specialist Role Specific Skills	Amplification and Guidance (where required)
	• Demonstrate the correct selection and use of materials, tools and equipment • Demonstrate safe working practices, including appropriate use of PPE

Pathway: Network Maintenance Craftsperson – Pressure Management Specialist Role Specific Skills	Amplification and Guidance (where required)
NMCPM1: Apply mechanical theories and principles for example thermo dynamics and laminar flow theories, in order to carry out diagnostic fault finding procedures	• Explain the application of scientific theories and engineering principles used for fault finding • Demonstrate understanding of scientific theories and engineering principles when undertaking fault finding
NMCPM2: Carry out remote pressure monitoring & control on the gas network	• Describe the ways in which pressures in the gas supply network can be controlled through remote monitoring systems • Use remote monitoring equipment to identify pressures in the network • Use control equipment to adjust pressure settings
NMCPM3: Inspect and monitor mechanical systems and equipment in order to ensure safety and suitability for service	• Describe how to check that equipment is fit for purpose and safe to use

Pathway: Network Maintenance Craftsperson – Pressure Management Specialist Role Specific Skills	Amplification and Guidance (where required)
	• Give examples of equipment that would be considered unsafe to use • State the actions to be taken if equipment is found to be in an unsafe condition • Carry out system checks to ensure safety and correct operation • Giver examples of when systems and equipment could be considered unsuitable for use
NMCPM5: Maintain, dismantle and repair mechanical equipment and components	• Explain the role and purpose of component parts of pressure control installations • Demonstrate awareness of Company procedures for maintenance of equipment and components • Apply safe working practices for the task • Correctly select and use tools, equipment and materials for the task
NMCPM7: Assist in installing mechanical systems and equipment	• Describe safe ways of working when installing systems and equipment • Explain the benefits of working with others when installing systems and equipment • Explain why it is necessary to maintain a clean and tidy working area

Pathway: Network Maintenance Craftsperson – Pressure Management Specialist Role Specific Skills	Amplification and Guidance (where required)
	• State the tools and equipment used when installing systems and equipment • Describe the operational process for installing systems and equipment • Explain the role and purpose of equipment being installed
NMCPM8: Install, maintain and dismantle a wide range of complex plant, machinery and components including pressure regulators, safety devices, system protection devices and monitoring equipment	• Describe the mode of operation of a range of pressure regulators, safety devices and system protection devices • Explain how the component parts interact effectively together to provide effective pressure control • Correctly identify and explain the role and purpose of all component parts • Correctly identify the fault modes for each component part • Explain how to test the correct operation of each component
NMCPM10: Interpret plans and drawings to install, position or re-locate mechanical equipment and components	• Know the reason and benefits of referring to plans and drawings when installing systems and components • Describe how to interpret information given on plans and drawings • Correctly read and interpret plans and drawings • Follow plans and drawings to undertake a task in compliance with requirements
NMCPM11: Test, service and repair mechanical equipment as part of planned	• Describe how to test the operation of equipment during planned or reactive maintenance

Pathway: Network Maintenance Craftsperson – Pressure Management Specialist Role Specific Skills	Amplification and Guidance (where required)
preventative maintenance and/or reactive maintenance programmes	• Describe how to service component parts of pressure control equipment during planned or reactive maintenance • Identify maintenance requirements for various types of pressure control equipment • Identify components requiring repair and demonstrate appropriate repair methods • Demonstrate methods of testing equipment as part of maintenance activities
NMCPM12: Install mechanical components including regulators, filters, valves, compressor equipment	• Describe how to safely install component parts of pressure control equipment, including the use of tools and equipment • Explain how to ensure the correct configuration for the installation of components, including direction of flow • Correctly select components to be installed • Effectively use tools and equipment to install components • Install components, ensuring correct configuration

Pathway: Network Maintenance Craftsperson – Pressure Management Specialist Role Specific Knowledge	Amplification and Guidance (where required)
NMCPM26 The safety processes to be followed when planning to access pressure control equipment	• Describe the risks to safety posed by pressure control equipment when accessing housings

	• Describe safe working practices to minimise risk to self and others when working on pressure control equipment

Pathway: Network Pipelines Maintenance Craftsperson Specialist Role Specific Skills	Amplification and Guidance (where required)
NPMC1 Apply non-destructive testing theories and principles in order to carry out diagnostic fault finding procedures	
NPMC2 Apply the theories and principles of integrity testing, purging commissioning and de-commission of gas pipelines and associated equipment and components	
NPMC3 Inspect, monitor, maintain, dismantle, install and repair pipeline systems and equipment for example, flow regulators, safety devices, system protection devices, measurement devices and monitoring equipment	
NPMC4 Remove, repair and replace components of gas transportation pipelines and associated equipment	
NPMC6 Take action to prevent third parties causing damage to gas transportation pipeline assets and equipment i.e., tracing, marking,	

Pathway: Network Pipelines Maintenance Craftsperson Specialist Role Specific Skills	Amplification and Guidance (where required)
monitoring third party activities and responding to encroachments	
NPMC9 Interpret plans and drawings to install, position or re-locate pipeline equipment and components	
NPMC10 Test, service and repair pipeline equipment as part of planned preventative maintenance and/or reactive maintenance programmes	
NPMC11 Operate specialised tools and equipment for pipeline maintenance operations for example, in line inspection tools, damage assessment, intelligent pigging, valve repairs, flow stopping and under pressure drilling	

Pathway: Emergency Response Craftsperson Specialist Role Specific Skills	Amplification and Guidance (where required)
NERC1 Respond to public reported upstream gas emergencies, including damage to or failure of gas mains and services that supply a consumer's premise	• Demonstrate the application of procedures for responding to and dealing with reported gas escapes from the gas transportation network • Demonstrate actions to take in the event of loss of supply

Pathway: Emergency Response Craftsperson Specialist Role Specific Skills	Amplification and Guidance (where required)
	• Demonstrate understanding of the potential dangers associated with an upstream gas escape • Demonstrate actions required to safeguard life and property when attending an upstream gas escape • Demonstrate the correct application of gas emergency procedures • Demonstrate awareness of the potential issues associated with loss of mains supplies in an area • Demonstrate actions required when responding to a loss of supply to a customer's premise • Examples: gas escapes, loss of supply
NERC2 Respond to public reported downstream gas emergencies, including reported gas escapes inside customers properties and reports of carbon monoxide	• Demonstrate the correct application of company specific procedures for gas escapes from downstream installations • Demonstrate the correct application of company specific procedures associated with reports of carbon monoxide and other gas emergencies • Demonstrate understanding of the potential dangers associated with an internal gas escape • Demonstrate understanding of the potential dangers associated with carbon monoxide

Pathway: Emergency Response Craftsperson Specialist Role Specific Skills	Amplification and Guidance (where required)
	• Demonstrate actions required to safeguard life and property when attending an internal gas escape • Demonstrate actions required to safeguard life and property when attending a report of carbon monoxide • Demonstrate the correct application of gas emergency procedures • Demonstrate awareness of the potential issues associated with loss of mains supplies in an area • Demonstrate actions required when responding to a loss of supply to a customer's premise • Examples: internal gas escapes, reports of carbon monoxide
NERC3 Carry out site investigations in relation to gas emergencies, in line with company procedures	• Complete initial assessments of site and determine actions to be taken • Select and use appropriate PPE • Demonstrate care for the safety of yourself, colleagues and others • Correctly select and use equipment for the task • Correctly apply Company procedures for site investigations • Correctly record outcomes and actions taken during site investigations

Pathway: Emergency Response Craftsperson Specialist Role Specific Skills	Amplification and Guidance (where required)
	• Demonstrate understanding of company procedures associated with gas emergencies • Demonstrate effective application of procedures when undertaking a site search for an external gas escape • Demonstrate effective application of procedures when undertaking a site search for an internal gas escape • Examples: internal gas escapes, external gas escapes, loss of supply • Examples: barholing, use of gas detection equipment
NERC4 Use gas detection equipment to identify gas concentrations	• Set up and confirm the functionality of gas detection equipment, including appropriate pre-use checks • Demonstrate the use of gas detection equipment when attending upstream and downstream gas emergencies • Demonstrate care for the safety of yourself, colleagues and others • Correctly record outcomes from site investigations • Correctly select gas detection equipment for the task • Correctly apply pre-use checks to gas detection equipment • Demonstrate the correct use of gas detection equipment • Examples: flame ionisation equipment (FIM/FID), gascoseeker, gas surveyor

Pathway: Emergency Response Craftsperson Specialist Role Specific Skills	Amplification and Guidance (where required)
NERC5 Interpret gas readings to determine the safety of the site	• Correctly interpret the readings from gas detection equipment • Identify critical gas concentrations and take the appropriate action • Correctly interpret records of gas escape readings, identifying whether site conditions are improving or worsening • Take appropriate actions in response to site conditions • Correctly interpret the outputs of gas detection equipment • Accurately record the results of a site survey • Example: explosive (ignition) range of natural gas • Examples: Gas in air readings, lower explosive limit readings, parts per million readings
NERC6 Apply evacuation procedures where required	• Identify critical gas concentrations and take the appropriate action • Correctly apply evacuation and reoccupation procedures • Demonstrate care for customers when evacuating and record appropriate details • Demonstrate understanding of evacuation and reoccupation criteria • Demonstrate the correct application of evacuation and reoccupation criteria

Pathway: Emergency Response Craftsperson Specialist Role Specific Skills	Amplification and Guidance (where required)
NERC7 Apply the industry unsafe situations procedures	• Correctly apply the Unsafe Situation procedures taking appropriate action for the situations encountered • Complete industry or company specific reports as required by the unsafe situation procedures • Demonstrate understanding of the Unsafe Situations procedures • Demonstrate the correct application of the Unsafe Situations procedures, including “At Risk” and “Immediately Dangerous” situations • Demonstrate the correct use of warning notices, as appropriate to the situation
NERC8 Install and exchange gas meters and pressure regulators	• Correctly select and use appropriate PPE • Demonstrate care for the safety of yourself, colleagues, others and the customers premises • Correctly select and use equipment for the task • Correctly install and exchange meters and regulators • Correctly apply tightness testing procedures • Correctly maintain details of work undertaken and record this in the appropriate manner • Demonstrate the correct application of procedures for the exchange of meters and regulators

Pathway: Emergency Response Craftsperson Specialist Role Specific Skills	Amplification and Guidance (where required)
	• Maintain appropriate records for a meter exchange
NERC9 Install domestic pipework	• Correctly select and use appropriate PPE • Demonstrate care for the safety of yourself, colleagues, others and the customers premises • Plan the work activity and select and use equipment appropriate for the task • Correctly install domestic pipework in line with industry standards and/or company procedures • Correctly apply tightness testing procedures • Demonstrate effective working practices for the installation of copper pipework, including jointing methods • Demonstrate care for customer's property when undertaking hot work • Demonstrate quality workmanship to produce a visually acceptable installation
NERC10 Tightness test, purge, commission and decommission domestic gas pipework	• Correctly select and use appropriate PPE • Demonstrate care for the safety of yourself, colleagues, others and customers premises • Correctly select and use equipment for the task

Pathway: Emergency Response Craftsperson Specialist Role Specific Skills	Amplification and Guidance (where required)
	• Correctly apply tightness testing procedures for domestic pipework • Correctly purge and commission domestic pipework • Correctly purge and decommission domestic pipework • Demonstrate understanding of procedures for tightness testing a domestic installation • Demonstrate understanding of procedures for purging and commissioning a domestic installation • Demonstrate the effective tightness testing of a domestic installation • Demonstrate the effective purging and commissioning of a domestic installation • Maintain appropriate records of the installation
NERC11 Tightness test, purge, commission and decommission non-domestic gas pipework	• Correctly select and use appropriate PPE • Demonstrate care for the safety of yourself, colleagues, others and customers premises • Correctly select and use equipment for the task • Correctly apply tightness testing procedures for non-domestic pipework • Correctly purge and commission non-domestic pipework

Pathway: Emergency Response Craftsperson Specialist Role Specific Skills	Amplification and Guidance (where required)
	• Demonstrate understanding of procedures for tightness testing a non-domestic installation • Demonstrate understanding of procedures for purging and commissioning a non-domestic installation • Carry out the calculations necessary for the tightness testing and purging of a non-domestic installation • Demonstrate the effective tightness testing of a nondomestic installation • Demonstrate the effective purging and commissioning of a non-domestic installation • Maintain appropriate records of the installation
NERC18 Understand how to identify gas appliances and installations that are not compliant with industry standards and may be deemed as unsafe	• Understand how to identify gas appliances and installations that are not compliant with industry standards and may be deemed as unsafe • Explain what is meant by the terms 'Immediately Dangerous' and 'At Risk' as applicable under the Gas Industry Unsafe Situations procedures • Give examples of situations which would be classed as 'Immediately Dangerous' and 'At Risk' • Describe the signs of incomplete combustion on an appliance

Pathway: Emergency Response Craftsperson Specialist Role Specific Skills	Amplification and Guidance (where required)
	• Recognise signs of incomplete combustion or other indications of an unsafe installation • Demonstrate the actions required when an unsafe installation is identified
NERC19 Understand how to comply with the requirements of the Gas Industry Unsafe Situations Procedure, including RIDDOR reporting requirements	• Describe the actions to be taken when an appliance or installation is classified as 'Immediately Dangerous' and 'At Risk' • Explain what is reportable under the RIDDOR regulations • Describe how to make a RIDDOR report and the timescales applicable • Demonstrate understanding of the Unsafe Situations procedures • Demonstrate the correct application of the Unsafe Situations procedures, including “At Risk” and “Immediately Dangerous” situations • Demonstrate the correct use of warning notices, as appropriate to the situation • Demonstrate awareness of the RIDDOR regulations and reporting requirements

Pathway: Emergency Response Craftsperson Specialist Role Specific Skills	Amplification and Guidance (where required)
NERC24 Understand when to liaise with emergency services and other statutory authorities as necessary	• Give examples of situations in which it might be appropriate to call for emergency services to attend site (police, fire, ambulance) • Describe how the emergency services can provide assistance on site during an emergency • Describe the types of information which would be beneficial to share between a gas operative and the emergency services on site during an emergency • Explain when Emergency Services may be required to attend site (including Police, Fire, Ambulance) • Explain the interactions likely to be required with the Emergency Services when attending a gas emergency • Demonstrate awareness of Statutory Authorities and their scope of authority

Practical Task/Observation Roles and Responsibilities

Role	Responsibility
Employer Assessor	Provide written and verbal instructions for the practical task/observation. Write a factual report (facts, true details and exact examples observed on the day for the apprentice) of the practical task/observation verifying whether the task was completed appropriately. The independent assessor will review the factual report before conducting the technical interview session 1 which will be based on the practical task. Record and report assessment outcome decisions for each apprentice, following instructions and using assessment recording documentation provided by Energy & Environment Awards.
Employer/Training Provider	The training provider must liaise effectively with the employer to ensure the apprentice is prepared for the practical task/observation. Provide the venue for the practical task/observation which must be suitably equipped to allow the apprentice to attempt all aspects of the practical task/observation. Provide all necessary tools and equipment for the apprentice. Ensure the apprentice has access to the resources used daily. Use Energy & Environment Awards Practical Observation Review Service to review fitness for purpose of the assessment task.
Energy & Environment Awards	Arrange for the practical task/observation to take place, in consultation with the employer/training provider and employer assessor.

Component 2: Technical Interview – Session 2: Based on the evidence in the logbook

Overview

The technical interview is based on the apprentice's logbook of evidence and focuses on the KSBs related to their work. It is to allow the apprentice to demonstrate how they have met the KSBs to carry out their occupational role as a Gas Network Craftsperson effectively and safely. The technical interview allows for testing of responses where there are a range of potential answers.

The entire logbook, compiled throughout the apprenticeship and completed by Gateway must be submitted to Energy & Environment Awards.

Step-by-Step Guide

The table below provides a step-by-step guide on how the technical interview based on the logbook of evidence will be carried out:

Assessors	1 independent assessor, appointed and approved by Energy & Environment Awards will conduct the technical interview. 1 employer assessor, appointed and approved by Energy & Environment Awards from the apprentice's employer or training provider is allowed to be present in the room whilst the technical interview is being conducted which would normally be the employer assessor who conducted the practical observation. The employer assessor: • **must not** amplify or clarify points made by the apprentice • role is to provide context for the independent assessor with clarifications around specific company policies and procedures
Technical Interview (based on the logbook) structure	**Locations:** Employer's premises or a suitable venue for example a training provider's premises. **Time:** The technical interview for session 2 will last for 1 hour and +/- 10% to allow the apprentice to finish the last answer. The technical interview must be completed **within three-weeks of the practical task completion.**

The Technical Interview – Session 2 will:

- focus on the on-programme (pre-gateways contents of the logbook)
- last 1 hour +/- 10%, and will take place after the 15 – 20-minute break taken after Session 1
- be a discussion between the apprentice and the independent assessor
- be conducted by 1 independent assessor accompanied by the employer assessor, see 'Assessors' above
- be face to face or remote, as agreed
- be recorded in writing using the technical interview record template provided by Energy & Environment Awards
- be video recorded using relevant technology such as Microsoft Teams or an audio recording device
- be conducted under examination conditions

The apprentice will have access to their logbook of evidence throughout the technical interview.

Logbook:

- The apprentice's Manager/Mentor will typically support the development of the evidence logbook in accordance with company policy and procedures
- See 'Logbook of Evidence Requirements' guidance below on the content of evidence
- The logbook must contain sufficient quality evidence relating to each element of the standard covered by the technical interview. Typically, this will be contained in small number of job write-ups produced towards the end of the training periods
- Although questioning will cover ALL the elements of the standard (listed below in this section of the Specification), they will prioritise areas according to what they see in the logbook

	Types of questions: • **Session 2** - will only focus on pre-gateway evidence in the apprentice's logbook and the independent assessor will ask a set of 10 questions relating to this evidence • Set questions which maybe contextualised to the contents of the apprentice's logbook • Follow-up questions to seek clarification
What topics will be covered?	For further details refer to **'Knowledge, Skills and Behaviours (KSBs) Coverage pages 66 - 79.**
When will the logbook of evidence be referred to?	**The logbook of evidence**: • will be reviewed by the independent assessor before the technical interview • can be referred to by the apprentice to illustrate their answers **Note:** the logbook of evidence is not directly assessed.
Grading	Fail, Pass or Distinction

Logbook Evidence Requirements

The requirements are as follows:

Logbook Mapping Document The apprentice must map their logbook of evidence to the KSBs as this evidence will be used by the independent assessor to assess the apprentice during the technical interview. The logbook mapping document must be clearly referenced and included at the front of the logbook. For further guidance on mapping refer to: • Section 5 Practice Guidance on logbook of evidence and apprentice mapping • Appendix G, GNC Supporting Documents 'Logbook Mapping Document.'
How will the training provider submit the apprentice's logbook to Energy & Environment Awards? As part of the pre-requisite Gateway requirements the apprentice must have compiled and submitted a logbook of evidence that includes a logbook mapping document (placed at the front of the logbook), which the technical interview will be based on.

Technical Interview Session 2 – On-programme (pre-gateway): Knowledge, Skills and Behaviours (KSBs) coverage

The Technical Interview based on the on-programme evidence in the logbook covers:

Technical Interview Session 2 – On-programme: Core Knowledge	Amplification and Guidance (where required)
K1 Company testing, and commissioning procedures needed to establish the condition of gas assets, equipment, network infrastructure and the actions needed as a result of the tests. This includes both practical applications and the use of diagnostic techniques and IT systems	• State the procedures to be followed • Explain the purpose of testing • Describe the diagnostic techniques which may be employed • Explain how to interpret test results and the actions to take • Describe the impact of malfunction or failure
K4 Company maintenance practices, processes and procedures associated with gas network systems, controls and equipment	• Explain the importance of following procedures • Demonstrate specific knowledge of key procedures
K6 Company policies, procedures and engineering instructions as specified by the employer	• Explain the difference between policies, procedures, and engineering instructions • State the range and purpose of company policies, procedures, and engineering instructions • Explain the importance of following policies, procedures, and engineering instructions

Technical Interview Session 2 – On-programme: Core Knowledge	Amplification and Guidance (where required)
	• Demonstrate specific knowledge of key company policies, procedures, and engineering instructions

Technical Interview Session 2 – On-programme: Core Skills	Amplification and Guidance (where required)
S1 Undertake and document risk assessments in accordance with company procedures	• Demonstrate knowledge of risk assessment processes • Correctly identify hazards and risks • Correctly identify and implement mitigation actions • Correctly use documentation
S2 Comply with workplace health, safety & environmental practices and regulations, maintaining a safe and secure working environment	• Correctly identify stakeholders who need to be informed of work being undertaken • Demonstrate understanding and application of safe working practices • Establish and maintain a safe work area/site
S3 Follow engineering instructions and company procedures to complete tasks safely and on-time	• Demonstrate understanding and application of relevant procedures for the task
S14 Liaise with gas consumers, statutory agencies and members of the public in order to ensure their safety	• Correctly identify stakeholders who need to be informed of work being undertaken

Technical Interview Session 2 – On-programme: Core Skills	Amplification and Guidance (where required)
	• Demonstrate understanding of the importance of effective liaison with others
S15 Accurately update company systems with details of work undertaken	• Demonstrate the use of company specific systems and records • Demonstrate the updating of company systems and records

Technical Interview Session 2 – On-programme: Core Behaviours	Amplification and Guidance (where required)
B2 Deliver a polite, courteous professional service to all customers, stakeholders and members of the public as appropriate	• Demonstrate understanding of company expectations and how to represent oneself in a polite and professional manner
B4 Accept accountability when undertaking individual and team tasks	• Demonstrate ownership of work undertaken by oneself
B7 Recognise personal limitations and seek advice from managers, experts and specialists when required	• Recognise and accepts levels of authority • Recognise own level of authority, including limitations • Willing to seek guidance
B9 Receptive to the needs and concerns of others, especially where related to diversity and equality	• Demonstrate awareness of the needs of others with relation to equality and diversity • Provides examples of being receptive to the needs of others in relation to equality and diversity

Technical Interview Session 2 – On-programme: Core Behaviours	Amplification and Guidance (where required)
B10 Committed to carrying out and recording Continued Professional Development necessary to maintain and enhance competence	• Understand the need to develop and maintain competence to undertake work activities • Recognise the requirements and benefits of Continued Professional Development (CPD) • Provides examples of maintaining CPD
B11 Exercises responsibilities in an ethical manner	• Understands, recognises and applies the requirements for ethical behaviour
B12 Interacts with people and approaches work activities in a way that contributes to continuous self-improvement	• Demonstrate commitment to self-development

Pathway: Network Maintenance Craftsperson Electrical and Instrumentation Specialist Role Specific Skills	Amplification and Guidance (where required)
NMCEi3 Maintain site lighting and fixed and portable equipment which may include generators, batteries and associated equipment	• Demonstrate the application of maintaining site lighting, and other portable equipment • Use test and calibration equipment required for the task • Demonstrate the measures to be taken to ensure equipment is suitable and safe for use

Pathway: Network Maintenance Craftsperson Electrical and Instrumentation Specialist Role Specific Skills	Amplification and Guidance (where required)
NMCEi6 Configure telemetry outstation and internal systems	• Demonstrate the use and application of relevant procedures • Demonstrate the operation and configuration of telemetered systems • Undertake work to the required outcome and quality • Demonstrate the correct selection and use of materials, tools and test equipment • Demonstrate safe working practices, including the appropriate use of PPE
NMCEi7 Identify and resolve data quality and calibration issues	• Demonstrate the use and application of data quality systems, their limitations and implications and how to correct errors • Demonstrate confirming the accurate calibration of equipment identifying the potential implications of this being incorrect
NMCEi8 Test, calibrate and validate fixed and portable analogue and digital instrumentation	• Demonstrate the application of relevant company procedures • Demonstrate the testing, calibration and validation of instrumentation
NMCEi10 Use standards and specifications to improve the information gathered by telemetry data	• Demonstrate the application of relevant standards and specifications

Pathway: Network Maintenance Craftsperson Electrical and Instrumentation Specialist Role Specific Skills	Amplification and Guidance (where required)
NMCEi11 Inspect and maintain security equipment, telecommunication devices and alarm systems	• Demonstrate the inspection and confirmation of operation of site security systems • Demonstrate the inspection and confirmation of operation of telecommunication and alarm systems • Correctly apply relevant procedures when carrying out work
NMCEi13 Provide support to day-to-day users of instrumentation and control systems	• Demonstrate the support that may be needed by others • Give examples of data transfer to other users and control operators
NMCEi14 Ensure consistent and valid data is available for business and regulation purposes	• Demonstrate the capture of valid data • Demonstrate how to review, update or amend previous data capture
NMCEi17 The permitry requirements when maintaining or configuring telemetry systems or undertaking works that may initiate system alarms	• Explain the purpose and use of alarms on telemetry systems • Explain the types and purpose of permits • Explain the importance of complying with permits • State the actions to take if unable to comply with permit requirements
NMCEi18 Recognise the processes to be followed in order to identify and resolve data quality and calibration issues	• Describe types of data quality issues, potential reasons/causes and potential implications

Pathway: Network Maintenance Craftsperson Electrical and Instrumentation Specialist Role Specific Skills	Amplification and Guidance (where required)
	• Describe types of calibrations issues, potential reasons/causes and potential implications • Explain how to identify and resolve issues associated with data quality and calibration
NMCEi19 Understand how to test and calibrate instrumentation and control equipment in accordance with company-specific procedures	• State and explain relevant company procedures for testing and calibration • Identify and describe the types of instrumentation and equipment that requires calibration • Describe the calibration procedures for different types of instrumentation and equipment • Describe the potential implications of incorrect calibration
NMCEi20 The theories used to maintain, test and calibrate electrical equipment in line with company specific procedures	• State and explain relevant company procedures for testing and calibration • Explain theories relevant to the calibration of different types of electrical equipment
NMCEi22 Identify relevant, company specific procedures, and know how to access such documentation	• State key company procedures for electrical and instrumentation work and their scope • Explain where company procedures are held and how they are accessed

Pathway: Network Maintenance Craftsperson Pressure Management Specialist Role Specific Skills	Amplification and Guidance (where required)
NMCPM3 Inspect and monitor mechanical systems and equipment in order to ensure safety and suitability for service	• Describe how to check that equipment is fit for purpose and safe to use • Give examples of equipment that would be considered unsafe to use • State the actions to be taken if equipment is found to be in an unsafe condition
NMCPM6 Test mechanical equipment and systems to ensure integrity, safety and security of supply	• Know how equipment and systems can impact on safety and security of supply • Explain how to test equipment and systems to ensure their effective operation
NMCPM8 Install, maintain and dismantle a wide range of complex plant, machinery and components including pressure regulators, safety devices, system protection devices and monitoring equipment	• Describe the mode of operation of a range of pressure regulators, safety devices and system protection devices • Explain how the component parts interact effectively together to provide effective pressure control
NMCPM9 Consult design specifications to analyse and calculate mechanical system parameters and rectification procedures	• Know the reason and benefits of referring to design specifications

Pathway: Network Maintenance Craftsperson Pressure Management Specialist Role Specific Skills	Amplification and Guidance (where required)
	• Give examples of when calculations have been made to determine and interpret system parameters
NMCPM10 Interpret plans and drawings to install, position or re-locate mechanical equipment and components	• Know the reason and benefits of referring to plans and drawings when installing systems and components • Describe how to interpret information given on plans and drawings
NMCPM11 Test, service and repair mechanical equipment as part of planned preventative maintenance and/or reactive maintenance programmes	• Describe how to test the operation of equipment during planned or reactive maintenance • Describe how to service component parts of pressure control equipment during planned or reactive maintenance
NMCPM12 Install mechanical components including regulators, filters, valves, compressor equipment	• Describe how to safely install component parts of pressure control equipment, including the use of tools and equipment • Explain how to ensure the correct configuration for the installation of components, including direction of flow
NMCPM13 Maintain mechanical components including regulators, filters, valves, compressor equipment	• Describe how to safely maintain component parts of pressure control equipment, including the use of tools and equipment • Explain how to confirm the correct operation of pressure control equipment following maintenance

Pathway: Network Maintenance Craftsperson Pressure Management Specialist Role Specific Skills	Amplification and Guidance (where required)
NMCPM14 Apply pressure reduction techniques to assist in dealing with gas emergencies	• Explain the reason for reducing pressures in the network when supporting gas emergencies • Describe acceptable methods for reducing pressures during emergency situations • Explain how to ensure security of supply when reducing pressures during gas emergencies
NMCPM16 Locate and avoid underground plant and equipment prior to and whilst undertaking activities	• State the risks posed by buried plant and equipment • Describe the correct use of plant detection equipment, including pre-use checks • Describe the actions to be taken when underground plant is detected
Pathway: Network Maintenance Craftsperson Pressure Management Role Specific Knowledge	Amplification and Guidance (where required)
NMCPM20 Understand the permitry requirements when maintaining or configuring pressure control equipment	• Explain the purpose of permits to control operations • Explain when permits are required for work on pressure control equipment • Know how to comply with permit requirements

Pathway: Network Pipelines Maintenance Craftsperson Role Specific Skills	Amplification and Guidance (where required)
NPMC3 Inspect, monitor, maintain, dismantle, install and repair pipeline systems and equipment for example, flow regulators, safety devices, system protection devices, measurement devices and monitoring equipment	
NPMC5 Undertake corrosion prevention activities i.e., cathodic protection systems and monitoring, coating and wrapping	
NPMC6 Take action to prevent third parties causing damage to gas transportation pipeline assets and equipment i.e., tracing, marking, monitoring third party activities and responding to encroachments	
NPMC8 Consult design specifications to analyse and calculate pipeline system parameters and rectification procedures	
NPMC15 Organise additional resources to facilitate repairs as required	

Pathway: Emergency Response Craftsperson Role Specific Skills	Amplification and Guidance (where required)
NERC8 Install and exchange gas meters and pressure regulators	• Correctly select and use appropriate PPE • Demonstrate care for the safety of yourself, colleagues, others and the customers premises • Correctly select and use equipment for the task • Correctly install and exchange meters and regulators • Correctly apply tightness testing procedures • Correctly maintain details of work undertaken and record this in the appropriate manner
NERC9 Install domestic pipework	• Correctly select and use appropriate PPE • Demonstrate care for the safety of yourself, colleagues, others and the customers premises • Plan the work activity and select and use equipment appropriate for the task • Correctly install domestic pipework in line with industry standards and/or company procedures • Correctly apply tightness testing procedures
NERC10 Tightness test, purge, commission and de-commission domestic gas pipework	• Correctly select and use appropriate PPE • Demonstrate care for the safety of yourself, colleagues, others and customers premises • Correctly select and use equipment for the task

Pathway: Emergency Response Craftsperson Role Specific Skills	Amplification and Guidance (where required)
	• Correctly apply tightness testing procedures for domestic pipework • Correctly purge and commission domestic pipework • Correctly purge and decommission domestic pipework
NERC14 Organise additional resources to facilitate repairs as required	• Identify the resources required and make appropriate arrangements to facilitate repairs
NERC18 Understand how to identify gas appliances and installations that are not compliant with industry standards and may be deemed as unsafe	• Explain what is meant by the terms 'Immediately Dangerous' and 'At Risk' as applicable under the Gas Industry Unsafe Situations procedures • Give examples of situations which would be classed as 'Immediately Dangerous' and 'At Risk' • Describe the signs of incomplete combustion on an appliance
NERC19 Understand how to comply with the requirements of the Gas Industry Unsafe Situations Procedure, including RIDDOR reporting requirements	• Describe the actions to be taken when an appliance or installation is classified as 'Immediately Dangerous' and 'At Risk' • Explain what is reportable under the RIDDOR regulations • Describe how to make a RIDDOR report and the timescales applicable
NERC21 Describe the requirements for the application of gas tightness testing procedures	• Describe the process for applying a tightness test to a domestic installation

Pathway: Emergency Response Craftsperson Role Specific Skills	Amplification and Guidance (where required)
	• Explain the purpose of each stage of the tightness testing process • State the pressure drop permissible during the tightness test of a domestic installation for different meter types and pipework sizes
NERC24 Understand when to liaise with emergency services and other statutory authorities as necessary	• Give examples of situations in which it might be appropriate to call for emergency services to attend site (police, fire, ambulance) • Describe how the emergency services can provide assistance on site during an emergency • Describe the types of information which would be beneficial to share between a gas craftsperson and the emergency services on site during an emergency

Section 3: Grading and Grading Criteria

Component 2: Technical Interview Session 1 Grading: Based on the practical task (post gateway) evidence in the logbook

The technical interview is graded by the independent assessor in the presence of a technical expert from the apprentice's employer both approved by Energy & Environment Awards.

- To achieve a pass all, pass criteria must be achieved
- To achieve a distinction all, pass criteria must be achieved and 5 of the 8 criteria from the indicative distinction criteria must be met

The following tables explain the criteria that are applied to achieve each grade for the technical interview session 1 which is based on the practical task.

Indicative ‘pass’ criteria for the Technical Interview based on the logbook: Session 1 – Practical Task

The following criteria are indicative of the pass criteria the independent assessor will be looking for when the apprentice takes part in the technical interview Session 1 which will be based upon evidence in the logbook from the practical task undertaken and the factual report submitted by the employer assessor.

Please Note: Indicative Pass Criteria - Amplification for core and role specific skills is provided after the table below.

Technical Interview – Session 1 Practical Task KSBs	Indicative Pass Criteria – Core and Select Role Specific Skills
P1 Working practices consistently ensure the health & safety of the apprentice and others, demonstrates how to evaluate risk and implements and reviews control measures which to ensure the safety, security and integrity of supply	S1; S2; S4; S9 and B3 Electrical and Instrumentation: NMCEi4; NMCEi12 Pressure Management : NMCPM3 ; NMCPM5 Pipelines Maintenance : NPMC6 Emergency Response: NERC1; NERC2; NERC3; NERC6; NERC7
P2 Work planning and execution was completed in a competent manner with both methodical and logical order without the need to change or repeat any tasks already completed	S3; S10; S11; B1; B5 and B6 Electrical and Instrumentation: NMCEi2; NMCEi9 Pressure Management : NMCPM1 ; NMCPM3 Pipelines Maintenance : NPMC3 ; NPMC10 Emergency Response : NERC1 ; NERC2 ; NERC3 ; NERC4 ; NERC5 ; NERC8 ; NERC9 ; NERC10 ; NERC11

Technical Interview – Session 1 Practical Task KSBs	Indicative Pass Criteria – Core and Select Role Specific Skills
P3 All tasks were completed in a competent manner in accordance with company specific operating procedures	S1; S5; S6 and S7 Electrical and Instrumentation: NMCEi1; NMCEi2; NMCEi4; NMCEi5; NMCEi9; NMCEi12; NMCEi15 Pressure Management: NMCPM1; NMCPM3; NMCPM5; NMCPM7; NMCPM8; NMCPM10; NMCPM11; NMCPM12 Pipelines Maintenance: NPMC1; NPMC2; NPMC3; NPMC4; NPMC9; NPMC10; NPMC11 Emergency Response: NERC1; NERC2; NERC3; NERC4; NERC5; NERC8; NERC9; NERC10; NERC11; NERC18; NERC19
P4 A safe, clean and ordered working environment was maintained at all times	B6 and B8 Electrical and Instrumentation: NMCEi2; NMCEi5 Pressure Management: NMCPM11; NMCPM12 Pipelines Maintenance: NPMC1; NPMC2; NPMC3; NPMC10 Emergency Response: NERC8; NERC9
P5 Explains the safety, process and company specific engineering requirements of the task undertaken in relation to their role	B3 and B4 Electrical and Instrumentation: NMCEi12 Pressure Management: NMCPM3; NMCPM5 Pipelines Maintenance: NPMC1; NPMC2; NPMC3; NPMC4; NPMC9; NPMC10 Emergency Response: NERC1 NERC2 NERC7 NERC24
P6 All tools and gas detection equipment are utilised in the correct manner and in	S7 and S8 Electrical and Instrumentation: NMCEi2; NMCEi4; NMCEi5; NMCEi9; NMCEi15

Technical Interview – Session 1 Practical Task KSBs	Indicative Pass Criteria – Core and Select Role Specific Skills
accordance with company specific requirements	Pressure Management: NMCPM1; NMCPM2; NMCPM3; NMCPM5; NMCPM7; NMCPM10; NMCPM11; NMCPM12 Pipelines Maintenance: NPMC10 Emergency Response: NERC4 NERC5 NERC8 NERC9 NERC10 NERC11
P7 Ensures that the engineering product or process output meets company specific requirements	S3; S4 and S5 Electrical and Instrumentation: NMCEi2; NMCEi9; NMCEi15 Pressure Management : NMCPM5 ; NMCPM12 Pipelines Maintenance : NPMC1 ; NPMC2 Emergency Response: NERC4; NERC5; NERC7; NERC8; NERC9; NERC10; NERC11
P8 All required documentation was fully and accurately completed in line with company specific requirements	S13 Electrical and Instrumentation: NMCEi1; NMCEi9 Pressure Management: NMCPM2; NMCPM3 Pipelines Maintenance: NPMC1; NPMC2; NPMC10 Emergency Response: NERC1; NERC2; NERC3; NERC5; NERC7; NERC8; NERC10; NERC11

Technical Interview Session 1 – Practical Task Core Skills	Indicative Pass Criteria
S1 Undertake and document risk assessments in accordance with company procedures	• Explain the purpose of risk assessment • Explain how risk assessments are undertaken, identifying hazards and the control measures put in place during the practical tasks
S2: Comply with workplace health, safety and environmental practices and regulations, maintaining a safe and secure working environment	• Describes how a safe working environment was established and maintained • Relates site safety to legislation, regulations and procedure
S3: Follow engineering instructions and company procedures to complete tasks safely and on-time	• States the procedures followed during the practical tasks
S4: Undertake inspection and examination of network assets in order to maintain the safe and compliant operation of the network to ensure the integrity, safety and security of supply	• Explains how the condition of assets or equipment was assessed during the practical tasks • Explains the potential impact of asset condition on security of supply
S5: Maintain and/or install gas engineering assets, components and associated equipment	• Identifies which assets or equipment were maintained • Describes how assets or equipment were maintained • Explains the reason(s) for maintaining assets or equipment
S6: Install, test, purge and commission gas network assets	• Describes how assets and equipment were installed • Describes how assets and equipment were tested • Explains the procedures followed for commissioning assets or equipment

Technical Interview Session 1 – Practical Task Core Skills	Indicative Pass Criteria
S7: Operate powered tools, such as drills, angle grinders, brush cutters and shot blasting equipment as required for network maintenance operations	• Describes the pre-use checks made on tools and equipment • Describes how tools were used safely for the task
S8: Use approved gas detection equipment to ensure safe environment	• Explains the purpose of checking for gas • Explains how gas detection was used for the task • Able to explain how the presence of gas and 'no gas' readings influence the task undertaken
S9: Use Personal Protective Equipment (PPE) and safety equipment in accordance with manufacturer's instructions and employer policy	• Describes the PPE worn and explains the purpose of each
S10: Obtain and analyse asset condition and performance information to facilitate decision making	• Describes the information used to determine condition or performance • Explains how data was used to make decisions during the task
S11: Identify, organise and use resources effectively to complete tasks, with consideration for cost, quality, safety, security and environmental impact	• Describes the resources used during the tasks and how these were used (tools, equipment, consumables) • Describes the process used to minimise waste and the way in which waste was disposed of • Demonstrates understanding of costs associated with resources
S13: Accurately record job information, complete job reports and process	• Describes records made during or after the tasks • Explains the purpose of the data recorded • Explains why data needs to be accurate

Technical Interview Session 1 – Practical Task Core Behaviours	Indicative Pass Criteria
B1: Display a self-disciplined, self-motivated approach	• Describes the personal approach taken for the tasks
B3: Demonstrate and apply a safety first approach	• Describes how safety was prioritised during the tasks
B4: Accept accountability when undertaking individual and team tasks	• Recognises personal responsibilities and accountabilities for the tasks
B5: Follows instruction from appropriate supervision, and makes decisions when required	• Recognises where work instructions are received from • States when personal decisions needed to be taken during the tasks
B6: Quality-focussed and professional in work and in personal standards	• Demonstrates understanding of why it is important to produce work of the required quality • Gives examples of potential consequences of poor quality work
B8: Accepts responsibility for work undertaken	• Takes ownership of work undertaken during the practical assessment • Identifies how work could have been undertaken better

Pathway: Network Maintenance Craftsperson - Electrical and Instrumentation Specialist Role Specific Skills	Indicative Pass Criteria
NMCEi1: Apply electrical theories and principles and use equipment to carry out diagnostic fault finding procedures	• Explains the electrical theories and principles applied when identifying and diagnosing faults during the tasks
NMCEi2: Inspect, maintain, repair, overhaul test and calibrate instrumentation and control equipment and circuits in accordance with company procedures	• Explains the purpose of calibrating equipment and which equipment was calibrated during the tasks • States and explains the procedures followed for work on instrumentation equipment during the practical tasks
NMCEi4: Carry out cable testing across a range of voltages to ensure safety and suitability for use	• Describes the process by which cables were tested • Explains the purpose of testing cables
NMCEi5: Install, maintain and dismantle instruments, controllers, probes, attachments, cabling, meters and display units	• Using examples describe the way in which instruments were installed or maintained • Explain how newly installed instruments were checked for correct operation
NMCEi9: Repair, maintain, configure and calibrate field instrumentation, communication devices and associated equipment used in system and process control	• Using examples describe the way in which communications or telemetry devices were installed or maintained • Explain how newly installed communications or telemetry devices were checked for correct operation
NMCEi12: Carry out isolation procedures to ensure process or system stability and the safety of personnel when carrying out operations	• Explains why it is necessary to safely isolate electrical equipment prior to work • Describes how electrical equipment was isolated during the practical tasks

Pathway: Network Maintenance Craftsperson - Electrical and Instrumentation Specialist Role Specific Skills	Indicative Pass Criteria
NMCEi15: Apply electrical knowledge and skills to install, maintain and dismantle a wide range of plant, machinery and components	• State and explain the theory applied when undertaking • Work on electrical equipment during the practical tasks

Pathway: Network Maintenance Craftsperson – Pressure Management Specialist Role Specific Skills	Indicative Pass Criteria
NMCPM1: Apply mechanical theories and principles for example thermo dynamics and laminar flow theories, in order to carry out diagnostic fault finding procedures	• Explains how scientific theories and engineering principles are applied during fault finding
NMCPM2: Carry out remote pressure monitoring & control on the gas network	• Describes the operation of remote pressure control systems • Explains the role of component parts of remote pressure control systems
NMCPM3: Inspect and monitor mechanical systems and equipment in order to ensure safety and suitability for service	• Explains the need to undertake safety checks and to ensure fitness for purpose • Describes the application of operational checks
NMCPM5: Maintain, dismantle and repair mechanical equipment and components	• Describes the operational procedures for the maintenance and repair of pressure control components

Pathway: Network Maintenance Craftsperson – Pressure Management Specialist Role Specific Skills	Indicative Pass Criteria
NMCPM7: Assist in installing mechanical systems and equipment	• Explains the role and purpose of the system and equipment being installed • Explain the role and purpose of the individual component parts of the system being installed • Describe the work procedures for installing the system and equipment

Pathway: Network Maintenance Craftsperson – Pressure Management Specialist Role Specific Skills	Indicative Pass Criteria
NMCPM8: Install, maintain and dismantle a wide range of complex plant, machinery and components including pressure regulators, safety devices, system protection devices and monitoring equipment	• Explains the role and purpose of the system and equipment being installed • Explain the role and purpose of the individual component parts of the system being installed • Describe the work procedures for installing the system and equipment
NMCPM10: Interpret plans and drawings to install, position or re-locate mechanical equipment and components	• Explains the purpose of using plans and drawings when undertaking work on site • Describes the information commonly provided on site plans and drawings, and explains the value of this information

Pathway: Network Maintenance Craftsperson – Pressure Management Specialist Role Specific Skills	Indicative Pass Criteria
NMCPM11: Test, service and repair mechanical equipment as part of planned preventative maintenance and/or reactive maintenance programmes	• Explains the purpose of planned preventative maintenance • Explains with examples when reactive maintenance may be required • Outlines the work procedures to be followed for maintenance activities
NMCPM12: Install mechanical components including regulators, filters, valves, compressor equipment	• Explains the role and purpose of all components • Explains how the component parts work collectively to provide an effective operational system

Pathway: Network Maintenance Craftsperson – Pressure Management Specialist Role Specific Knowledge	Indicative Pass Criteria
NMCPM26 The safety processes to be followed when planning to access pressure control equipment	• Explains the risks associated with accessing pressure control equipment • Describes ways of ensuring safe access

Pathway: Network Pipelines Maintenance Craftsperson Specialist Role Specific Skills	Indicative Pass Criteria
NPMC1 Apply non-destructive testing theories and principles in order to carry out diagnostic fault finding procedures	
NPMC2 Apply the theories and principles of integrity testing, purging commissioning and de-commission of gas pipelines and associated equipment and components	
NPMC3 Inspect, monitor, maintain, dismantle, install and repair pipeline systems and equipment for example, flow regulators, safety devices, system protection devices, measurement devices and monitoring equipment	
NPMC4 Remove, repair and replace components of gas transportation pipelines and associated equipment	
NPMC6 Take action to prevent third parties causing damage to gas transportation pipeline assets and equipment i.e., tracing, marking, monitoring third party activities and responding to encroachments	

Pathway: Network Pipelines Maintenance Craftsperson Specialist Role Specific Skills	Indicative Pass Criteria
NPMC9 Interpret plans and drawings to install, position or re-locate pipeline equipment and components	
NPMC10 Test, service and repair pipeline equipment as part of planned preventative maintenance and/or reactive maintenance programmes	
NPMC11 Operate specialised tools and equipment for pipeline maintenance operations for example, in line inspection tools, damage assessment, intelligent pigging, valve repairs, flow stopping and under pressure drilling	

Pathway: Emergency Response Craftsperson Role Specific Skills	Indicative Pass Criteria
NERC1 Respond to public reported upstream gas emergencies, including damage to or failure of gas mains and services that supply a consumer's premise	• Give examples of attendance at an upstream gas escape and the practices employed • Explain priorities when attending a gas escape • Example: external gas escape
NERC2 Respond to public reported downstream gas emergencies, including reported gas escapes	• Give examples of attendance at a report of carbon monoxide and the practices employed

Pathway: Emergency Response Craftsperson Role Specific Skills	Indicative Pass Criteria
inside customers properties and reports of carbon monoxide	• Explain the dangers associated with carbon monoxide • Example: internal gas escapes, reports of carbon monoxide
NERC3 Carry out site investigations in relation to gas emergencies, in line with company procedures	• Describe with examples how a site search has been conducted for a reported internal gas escape • Describe with examples how a site search has been conducted for a reported external gas escape • Examples: internal gas escapes, external gas escapes, loss of supply • Examples: barhole survey, use of gas detection equipment, use of site search records
NERC4 Use gas detection equipment to identify gas concentrations	• Describe how gas detection equipment has been used • Examples: flame ionisation equipment (FIM/FID), gascoseeker, gas surveyor
NERC5 Interpret gas readings to determine the safety of the site	• Explain the relationship between GIA and LEL readings • Describe with examples how readings have been used to determine next actions on site • Example: explosive (ignition) range of natural gas • Examples: Gas in air readings, lower explosive limit readings, parts per million readings

Pathway: Emergency Response Craftsperson Role Specific Skills	Indicative Pass Criteria
NERC6 Apply evacuation procedures where required	• State the criteria for evacuation and reoccupation • Give examples of situations where evacuation criteria have been applied
NERC7 Apply the industry unsafe situations procedures	• Give examples of situations where the Unsafe Situation procedures have been applied and the actions taken
NERC8 Install and exchange gas meters and pressure regulators	• Describe with examples how gas meters and regulators have been installed and the procedure followed
NERC9 Install domestic pipework	• Describe with examples how copper pipework has been installed
NERC10 Tightness test, purge, commission and decommission domestic gas pipework	• Describe with examples how tightness test has been applied to a domestic installation and the procedure followed • Describe with examples how a domestic installation has been purged and commissioned and the procedure followed
NERC11 Tightness test, purge, commission and decommission non-domestic gas pipework	• Describe with examples how tightness test has been applied to a nondomestic installation and the procedure followed • Describe with examples how a non- domestic installation has been purged and commissioned and the procedure followed

Pathway: Emergency Response Craftsperson Role Specific Knowledge	Indicative Pass Criteria
NERC18 Understand how to identify gas appliances and installations that are not compliant with industry standards and may be deemed as unsafe	• Describe the signs of incomplete combustion • Explain with examples actions to be taken if unsafe situations are identified
NERC19 Understand how to comply with the requirements of the Gas Industry Unsafe Situations Procedure, including RIDDOR reporting requirements	• Explain the actions to be taken under the Unsafe Situation procedures if an unsafe installation is identified • Explain with examples where the RIDDOR regulations have been applied and reported
NERC24 Understand when to liaise with emergency services and other statutory authorities as necessary	• Explain with examples situations where the Emergency Services might attend a gas emergency and the liaison likely to be necessary • Explain with examples situations where Statutory Authorities might attend a gas emergency and the liaison likely to be necessary

Indicative ‘distinction’ criteria for the technical interview based on logbook: Session 1 – Practical Task Evidence

- To achieve a distinction all, pass criteria must be achieved and a minimum of 5 distinction criteria from the 8 listed below must be met:

Technical Interview – Session 1 Practical Task KSBs	Indicative Distinction Criteria – Core and Select Role Specific Skills
D1 Critically appraised own approach to health and safety, acting as a role model by identifying deficiencies and providing proactive solutions to ensure the safety, security and integrity of supply	S1; S2; S4; S9 and B3 Electrical and Instrumentation: NMCEi4; NMCEi12 Pressure Management: NMCPM3; NMCPM5 Pipelines Maintenance: NPMC6 Emergency Response: NERC1; NERC2; NERC3; NERC6; NERC7 • Able to identify where and how safety practices could be improved • Able to identify where actions could improve risks to security of supply
D2 Uses recognised planning techniques and implements these to improve work efficiency Operates upon own initiative, demonstrates examples of critical reflection, analysis and evaluation	S3; S10; S11; B1; B5 and B6 Electrical and Instrumentation: NMCEi2; NMCEi9 Pressure Management: NMCPM1 ; NMCPM3 Pipelines Maintenance : NPMC3; NPMC10 Emergency Response : NERC1; NERC2; NERC3; NERC4; NERC5; NERC8; NERC9; NERC10; NERC11 • Able to explain why it is beneficial to plan jobs before starting • Able to give examples of effective job planning

Technical Interview – Session 1 Practical Task KSBs	Indicative Distinction Criteria – Core and Select Role Specific Skills
	• Able to review how planning was undertaken during the practical tasks and how this could be improved
D3 Shows understanding of the detailed technical aspects of the task undertaken and uses this understanding to evaluate the methods used to undertake the task. Consults and involves people from the team and other areas to achieve shared understanding	S1; S5; S6 and S7 Electrical and Instrumentation: NMCEi1; NMCEi2; NMCEi4; NMCEi5; NMCEi9; NMCEi12; NMCEi15 Pressure Management: NMCPM1; NMCPM3; NMCPM5; NMCPM7; NMCPM8; NMCPM10; NMCPM11; NMCPM12 Pipelines Maintenance: NPMC1; NPMC2; NPMC3; NPMC4; NPMC9; NPMC10; NPMC11 Emergency Response: NERC1; NERC2; NERC3; NERC4; NERC5; NERC8; NERC9; NERC10; NERC11; NERC18; NERC19 • Able to clearly explain electrical theories and principles and how these have been applied during the practical tasks • Recognises when it would be beneficial to consult with others before and during a task
D4 Educates others when an unsafe working environment is encountered and puts measures in place to mitigate safety issues	B6 and B8 Electrical and Instrumentation: NMCEi2; NMCEi5 Pressure Management: NMCPM11; NMCPM12 Pipelines Maintenance: NPMC1; NPMC2; NPMC3; NPMC10 Emergency Response: NERC8; NERC9 • Able to identify unsafe situations • Able to describe safe working practices

Technical Interview – Session 1 Practical Task KSBs	Indicative Distinction Criteria – Core and Select Role Specific Skills
	• Able to communicate effectively with others
D5 Explains the implications of not following safety, process and company specific engineering requirements of the task being undertaken	B3 and B4 Electrical and Instrumentation: NMCEi12 Pressure Management: NMCPM3; NMCPM5 Pipelines Maintenance: NPMC1; NPMC2; NPMC3; NPMC4; NPMC9; NPMC10 Emergency Response: NERC1 NERC2 NERC7 NERC24 • Explains the reason for following procedures and the potential consequences of unsafe working practices/deviating from procedures
D6 Uses a range of tools and gas detection equipment and is able to provide full explanation of standards and engineering principles that apply and the reasons for their recommended choice	S7 and S8 Electrical and Instrumentation: NMCEi2; NMCEi4; NMCEi5; NMCEi9; NMCEi15 Pressure Management: NMCPM1; NMCPM2; NMCPM3; NMCPM5; NMCPM7; NMCPM10; NMCPM11; NMCPM12 Pipelines Maintenance: NPMC10 Emergency Response: NERC4 NERC5 NERC8 NERC9 NERC10 NERC11 • Able to clearly explain the principles behind the way in which gas detection equipment operates and any limitations to its use • Able to explain outputs of gas detection equipment, including relationship between LEL and GIA scales
D7 Shows understanding of the relevant engineering	S3; S4 and S5

Technical Interview – Session 1 Practical Task KSBs	Indicative Distinction Criteria – Core and Select Role Specific Skills
products, their application and process outputs relative to their company specific requirements. Consistently applies reasoning to support decisions made	Electrical and Instrumentation: NMCEi2; NMCEi9; NMCEi15 Pressure Management: NMCPM5 ; NMCPM12 Pipelines Maintenance: NPMC1 ; NPMC2 Emergency Response: NERC4; NERC5; NERC7; NERC8; NERC9; NERC10; NERC11 • Able to explain reasons behind the choice of tools, equipment and materials made during the practical tasks
D8 Analyses, and interprets recorded data and articulates the need for accuracy and the importance of qualitative data capture and recording	S13 Electrical and Instrumentation: NMCEi1; NMCEi9 Pressure Management: NMCPM2; NMCPM3 Pipelines Maintenance: NPMC1; NPMC2; NPMC10 Emergency Response: NERC1; NERC2; NERC3; NERC5; NERC7; NERC8; NERC10; NERC11 • Able to review and analyse data and use this to make informed decisions during the practical tasks • Explains the requirement for data to be accurate, and potentially consequences of inaccurate data

Technical Interview Session 2 Grading: Based on the on-programme (pre- gateway) evidence in the logbook

The technical interview is graded by the independent assessor in the presence of a technical expert from the apprentice's employer both approved by Energy & Environment Awards.

- To achieve a pass all, pass criteria must be achieved
- To achieve a distinction all, pass criteria must be achieved and 4 of the 7 criteria from the indicative distinction criteria must be met

The following criteria are indicative of the **pass criteria** the independent assessor will be looking for when the apprentice takes part in the technical interview session 2 which will be based upon evidence in the logbook from their on-programme work.

Indicative ‘pass’ criteria for the Technical Interview based on the logbook: Session 2 – On-programme evidence

The following criteria are indicative of the pass criteria the independent assessor will be looking for when the apprentice takes part in the technical interview session 2 which will be based upon evidence in the logbook from the on-programme (pre-gateway) evidence.

Please Note: Indicative Pass Criteria - Amplification for core and role specific skills is provided after the table below.

Standard	Indicative Pass Criteria – Core and Select Role Specific Skills
P1 Identifies current Health, Safety and Environmental legislation and describes how they comply with the regulations applicable to their role	S1; S2; S3; S14 Electrical and Instrumentation: NMCEi17 Pressure Management : NMCPM3; NMCPM20 Pipelines Maintenance : NPMC5; NPMC6 Emergency Response: NERC18; NERC19
P2 Identifies the hazards they may encounter and explains the control measures needed to mitigate the risk caused by the hazard identified, these must be specific to activities on the gas network	K1; B7 Electrical and Instrumentation: NMCEi18; NMCEi19; NMCEi20; NMCEi22 Pressure Management : NMCPM3 Pipelines Maintenance : NPMC3; NPMC5; NPMC6 Emergency Response: NERC18
P3 Explains how they approach their work activities including effective customer	K1; S14; B2; B4; B7; B9; B11; B12 Electrical and Instrumentation: NMCEi13 Pressure Management : NMCPM14

Standard	Indicative Pass Criteria – Core and Select Role Specific Skills
communication and suitable task preparation required to carry out work relative to their job role on the gas network	Pipelines Maintenance : NPMC6; NPMC15 Emergency Response: NERC18; NERC19; NERC21; NERC24
P4 Identifies the company specific policies and procedures relevant to their role and demonstrates how these are applied. Complies with company CPD requirements	K1; K4; K6; S15; B10 Electrical and Instrumentation: NMCEi14 Pressure Management: NMCPM3; NMCPM10; NMCPM11; NMCPM12 Pipelines Maintenance: NPMC3; NPMC5 Emergency Response: NERC18; NERC19; NERC21
P5 Accurately describes the testing procedure for an item of plant, an installation or piece of equipment they encounter as part of their day-to-day duties on the gas network. Describes how to accurately interpret the results of the tests undertaken	K1; K4; S15; B4; B7; B12 Electrical and Instrumentation: NMCiE3; NMCEi6; NMCEi7; NMCEi8; NMCEi10; NMCEi11 Pressure Management: NMCPM10; NMCPM8; NMCPM6; NMCPM13 Pipelines Maintenance: NPMC3; NPMC5 Emergency Response: NERC8; NERC9; NERC10; NERC21
P6 Uses and applies mathematical calculations to determine the correct operating or safety parameters of equipment used or	K1 Electrical and Instrumentation: NMCEi6; NMCEi10; NMCEi14 Pressure Management: NMCPM8; NMCPM6; NMCPM13; NMCPM16 Pipelines Maintenance: NPMC3; NPMC5; NPMC8 Emergency Response: NERC9; NERC18; NERC21

Standard	Indicative Pass Criteria – Core and Select Role Specific Skills
encountered as part of their job role	
P7 Identify and describes instances where they have worked effectively on both an individual basis and as part of a team	S14; B4; B7; B9; B11; B12 Electrical and Instrumentation: NMCEi14 Pressure Management : NMCPM6; NMCPM9 Pipelines Maintenance : NPMC6 Emergency Response: NERC14; NERC18

Technical Interview Elements: Core Knowledge	Indicative Pass Criteria
K1 Company testing, and commissioning procedures needed to establish the condition of gas assets, equipment, network infrastructure and the actions needed as a result of the tests. This includes both practical applications and the use of diagnostic techniques and IT systems	• Gives examples of where equipment has been tested and commissioned and explain how this work was undertaken • Describes how diagnostic techniques were used to identify faults
K4 Company maintenance practices, processes and procedures associated with gas network systems, controls and equipment	• Gives examples of where control equipment has been maintained and explain how this work was undertaken • Describes the purpose of the control system and the role it plays in the network
K6 Company policies, procedures and engineering instructions as specified by the employer	• States examples of operational procedures and how these have been applied on site

Technical Interview Elements: Core Skills	Indicative Pass Criteria
S1 Undertake and document risk assessments in accordance with company procedures	• Gives examples of jobs where risk assessments have been undertaken on site • Describes the hazards identified and the control measures implemented
S2 Comply with workplace health, safety and environmental practices and regulations,	• Using examples, describes how a safe working environment has been established and maintained on site

Technical Interview Elements: Core Skills	Indicative Pass Criteria
maintaining a safe and secure working environment	
S3 Follow engineering instructions and company procedures to complete tasks safely and on-time	• Gives examples from sites when following procedures has helped to undertake the job safely and within required timescales
S14 Liaise with gas consumers, statutory agencies and members of the public in order to ensure their safety	• Gives examples of sites on which there was a need to liaise with gas consumers (customers) • Gives examples of situations that might be encountered where engagement with Statutory Agencies would be necessary
S15 Accurately update company systems with details of work undertaken	• Gives examples of data which needed to be updated on to Company systems • Explains the importance of recording data accurately

Technical Interview Elements: Core Behaviours	Indicative Pass Criteria
B2 Deliver a polite, courteous professional service to all customers, stakeholders and members of the public as appropriate	• Gives examples of engagement with others and the approach taken towards providing them with a professional service
B4 Accept accountability when undertaking individual and team tasks	• Gives examples of when accepting accountability for a job on site

Technical Interview Elements: Core Behaviours	Indicative Pass Criteria
B7 Recognise personal limitations and seek advice from managers, experts and specialists when required	• Gives examples of needing to seek advice and guidance from a colleague or manager
B9 Receptive to the needs and concerns of others, especially where related to diversity and equality	• Gives examples of responding to requests from others • Demonstrates awareness of equality and diversity when interacting with others
B10 Committed to carrying out and recording Continued Professional Development necessary to maintain and enhance competence	• Recognises the benefits of undertaking Continued Professional Development (CPD) • Describes examples of how CPD can be achieved
B11 Exercises responsibilities in an ethical manner	• Explains what is meant by “ethics” in relation to the undertaking of operational work • Gives examples of when an ethical approach has been adopted on site
B12 Interacts with people and approaches work activities in a way that contributes to continuous self-improvement	• Gives examples of learning from others • Gives examples of operating differently on site following guidance from others

Pathway: Network Maintenance Craftsperson Electrical and Instrumentation Specialist Role Specific Skills	Indicative Pass Criteria
NMCEi3 Maintain site lighting and fixed and portable equipment which may include generators, batteries and associated equipment	• Describes jobs where work has been undertaken on site lighting • Using examples, describes jobs where work has been undertaken on generators or batteries
NMCEi6 Configure telemetry outstation and internal systems	• Describes the way in which work was undertaken on telemetry systems • Explains how the correct operation of telemetry systems was confirmed
NMCEi7 Identify and resolve data quality and calibration issues	• Describes jobs where there were data quality issues and the way in which these were resolved • Describes jobs where there were calibration issues and explains the way in which these were resolved
NMCEi8 Test, calibrate and validate fixed and portable analogue and digital instrumentation	• Gives examples and describes work undertaken on portable instrumentation equipment
NMCEi10 Use standards and specifications to improve the information gathered by telemetry data	• Gives examples of telemetered data • Describes examples of how telemetered data has been improved and how this was achieved
NMCEi11 Inspect and maintain security equipment, telecommunication devices and alarm systems	• Gives examples and describes work undertaken on site security systems

Pathway: Network Maintenance Craftsperson Electrical and Instrumentation Specialist Role Specific Skills	Indicative Pass Criteria
	• Gives examples and describes work undertaken on site telecommunications systems
NMCEi13 Provide support to day-to-day users of instrumentation and control systems	• Describes examples of when and how support has been given to others who use the output from instrumentation or control systems
NMCEi14 Ensure consistent and valid data is available for business and regulation purposes	• Explains the importance of consistent and valid data from site • States examples of how data is used by the business
NMCEi17 The permitry requirements when maintaining or configuring telemetry systems or undertaking works that may initiate system alarms	• Explains the purpose of permit systems and the need to comply with requirements • Identifies work activities which might initiate site alarms
NMCEi18 Recognise the processes to be followed in order to identify and resolve data quality and calibration issues	• Describes work processes appropriate for the identification and resolution of data quality issues
NMCEi19 Understand how to test and calibrate instrumentation and control equipment in accordance with company-specific procedures	• Using examples, describes how to calibrate equipment
NMCEi20 The theories used to maintain, test and calibrate electrical equipment in line with company specific procedures	• Describes the application of electrical theory and principles for the calibration of equipment

Pathway: Network Maintenance Craftsperson Electrical and Instrumentation Specialist Role Specific Skills	Indicative Pass Criteria
NMCEi22 Identify relevant, company specific procedures, and know how to access such documentation	• Describes how to access company documentation

Pathway: Network Maintenance Craftsperson Pressure Management Role Specific Skills	Indicative Pass Criteria
NMCPM3 Inspect and monitor mechanical systems and equipment in order to ensure safety and suitability for service	• Gives examples of factors adversely affecting the operation of mechanical systems and equipment • Describe methods of inspecting and monitoring mechanical systems and equipment
NMCPM6 Test mechanical equipment and systems to ensure integrity, safety and security of supply	• Demonstrates understanding of the terms 'integrity' and 'security of supply' • Describes methods of testing mechanical equipment and systems
NMCPM8 Install, maintain and dismantle a wide range of complex plant, machinery and components including pressure regulators, safety devices, system protection devices and monitoring equipment	• Explains the function of component parts • Explains how component parts work together in an installation

Pathway: Network Maintenance Craftsperson Pressure Management Role Specific Skills	Indicative Pass Criteria
NMCPM9 Consult design specifications to analyse and calculate mechanical system parameters and rectification procedures	• Gives examples of the use of design specifications • Gives examples of the use of calculations of system parameters
NMCPM10 Interpret plans and drawings to install, position or re-locate mechanical equipment and components	• Gives examples of the use of plans and drawings • Explains the purpose and value of referring to plans and drawings
NMCPM11 Test, service and repair mechanical equipment as part of planned preventative maintenance and/or reactive maintenance programmes	• Using examples, explains the difference between planned and reactive maintenance • Describes the application of planned maintenance processes
NMCPM12 Install mechanical components including regulators, filters, valves, compressor equipment	• Describes work processes for installing component parts
NMCPM13 Maintain mechanical components including regulators, filters, valves, compressor equipment	• Describes work process for maintaining component parts
NMCPM14 Apply pressure reduction techniques to assist in dealing with gas emergencies	• Explains the purpose of reducing network pressures in emergency situations • Describes methods adopted for pressure reduction in emergencies on the gas network

Pathway: Network Maintenance Craftsperson Pressure Management Role Specific Skills	Indicative Pass Criteria
NMCPM16 Locate and avoid underground plant and equipment prior to and whilst undertaking activities	• Explains the risks associated with buried plant • Describes the correct use of plant detection equipment • Describes safe working practices when the presence of underground plant has been identified

Pathway: Network Maintenance Craftsperson Pressure Management Role Specific Knowledge	Indicative Pass Criteria
NMCPM20 Understand the permitry requirements when maintaining or configuring pressure control equipment	• Explains the purpose of and different types of permitry • Explains the application of Safe Control of Operations procedures • Explains the actions required if in receipt of a permit

Pathway: Network Pipelines Maintenance Craftsperson Role Specific Skills	Indicative Pass Criteria
NPMC3 Inspect, monitor, maintain, dismantle, install and repair pipeline systems and equipment for example, flow regulators, safety devices, system protection devices, measurement devices and monitoring equipment	
NPMC5 Undertake corrosion prevention activities i.e., cathodic protection systems and monitoring, coating and wrapping	
NPMC6 Take action to prevent third parties causing damage to gas transportation pipeline assets and equipment i.e., tracing, marking, monitoring third party activities and responding to encroachments	
NPMC8 Consult design specifications to analyse and calculate pipeline system parameters and rectification procedures	

Pathway: Network Pipelines Maintenance Craftsperson Role Specific Skills	Indicative Pass Criteria
NPMC15 Organise additional resources to facilitate repairs as required	

Pathway: Emergency Response Craftsperson Role Specific Skills	Indicative Pass Criteria
NERC8 Install and exchange gas meters and pressure regulators	• Using examples, describe how to exchange meters and regulators
NERC9 Install domestic pipework	• Using examples, describe the construction of domestic copper pipework • Explain precautions to be taken when undertaking hot work in customers' premises
NERC10 Tightness test, purge, commission and de-commission domestic gas pipework	• Describe how to apply a tightness test to a domestic installation • Describe how to purge a domestic installation
NERC14 Organise additional resources to facilitate repairs as required	• Give examples of arranging for additional resources to undertake repair
NERC18 Understand how to identify gas appliances and installations that are not compliant with industry standards and may be deemed as unsafe	• Describe the signs of incomplete combustion • Explain with examples actions to be taken if unsafe situations are identified

Pathway: Emergency Response Craftsperson Role Specific Skills	Indicative Pass Criteria
NERC19 Understand how to comply with the requirements of the Gas Industry Unsafe Situations Procedure, including RIDDOR reporting requirements	• Explain the actions to be taken under the Unsafe Situation procedures if an unsafe installation is identified • Explain with examples where the RIDDOR regulations have been applied and reported
NERC21 Describe the requirements for the application of gas tightness testing procedures	• Explain when it is necessary to undertake a tightness test of a domestic installation • Describe how to undertake a tightness test of a domestic installation
NERC24 Understand when to liaise with emergency services and other statutory authorities as necessary	• Explain with examples situations where the Emergency Services might attend a gas emergency and the liaison likely to be necessary • Explain with examples situations where Statutory Authorities might attend a gas emergency and the liaison likely to be necessary

Indicative ‘distinction’ criteria for the technical interview based on logbook: Session 2 – On-programme evidence

- To achieve a distinction all, pass criteria must be achieved and a minimum of 4 distinction criteria from the 7 listed below must be met:

Standard	Indicative Distinction Criteria – Core and Select Role Specific Skills
D1 Describes in detail how such legislation impacts their day-to-day activities	S1; S2; S3; S14 Electrical and Instrumentation: NMCEi17 Pressure Management : NMCPM3; NMCPM20 Pipelines Maintenance : NPMC5 ; NPMC6 Emergency Response: NERC18; NERC19 • Using examples, reviews how the requirements of legislation and regulations have directly impacted the way in which work has been undertaken on site • Able to quote legislation and explain how it has been applied on jobs
D2 Evaluates risk assessment processes including likelihood and consequence and is able to describe suitable control measures and how to implement such measures to reduce the residual risk value	K1; B7 Electrical and Instrumentation: NMCEi18; NMCEi19; NMCEi20; NMCEi22 Pressure Management : NMCPM3 Pipelines Maintenance : NPMC3 ; NPMC5 ; NPMC6 Emergency Response: NERC18 • Explains how risk assessment has been beneficial in improving on-site safety • Using examples, reviews the effectiveness of control measures implemented as a result of a risk assessment

Standard	Indicative Distinction Criteria – Core and Select Role Specific Skills
D3 Describes instances of using negotiation and influencing skills to coordinate contrasting views and drive actions	K1; S14; B2; B4; B7; B9; B11; B12 Electrical and Instrumentation: NMCEi13 Pressure Management : NMCPM14 Pipelines Maintenance : NPMC6 ; NPMC15 Emergency Response: NERC18; NERC19; NERC21; NERC24 • Evaluates the personal development gained from interacting with others over a range of activities • Explains how different approaches towards communications with others can be beneficial for different situations
D4 Relates company specific policies and procedures to legislative requirements. Is working towards professional recognition	K1; K4; K6; S15; B10 Electrical and Instrumentation: NMCEi14 Pressure Management: NMCPM3; NMCPM10; NMCPM11; NMCPM12 Pipelines Maintenance: NPMC3; NPMC5 Emergency Response: NERC18; NERC19; NERC21 • Using examples, clearly explains how policies and procedures have been applied in on-site situations and the benefits of following the prescribed approach to work • Using examples, explains how company policies and procedures are designed to satisfy the requirements of legislation and regulations • Explains the reason for Gas Safe registration and the opportunities for further professional registration

Standard	Indicative Distinction Criteria – Core and Select Role Specific Skills
D5 Details 3 of the following principles that drive testing requirements: • Explain why testing parameters are at the levels they are • Evaluate the results of such tests • Explain the potential consequences of failed tests • Interpret results and offer the reasons for failed tests • Provide potential solutions for failed tests	K1; K4; S15; B4; B7; B12 Electrical and Instrumentation: NMCiE3; NMCEi6; NMCEi7; NMCEi8; NMCEi10; NMCEi11 Pressure Management: NMCPM10; NMCPM8; NMCPM6; NMCPM13 Pipelines Maintenance: NPMC3; NPMC5 Emergency Response: NERC8; NERC9; NERC10; NERC21 • Using examples, explains why the accurate calibration of instruments is important and the potential consequences of wrong outputs • Explains how the testing of on-site equipment contributes to security of supply and site safety • Describes using example where the output of instruments requires interpretation before deciding on the next actions required
D6 Identifies solutions and recommends actions to be taken where the result of such calculation deliver unsatisfactory conclusions	K1 Electrical and Instrumentation: NMCEi6; NMCEi10; NMCEi14 Pressure Management: NMCPM8; NMCPM6; NMCPM13; NMCPM16 Pipelines Maintenance: NPMC3; NPMC5; NPMC8 Emergency Response: NERC9; NERC18; NERC21 • Provides examples of where calculations need to be made on site and the potential consequences of these calculations

Standard	Indicative Distinction Criteria – Core and Select Role Specific Skills
	• Using examples, explains how calculations made on site impact decisions associated with gas supply decisions
D7 Critically reflects upon situations where they have taken the initiative to lead a team to drive a project from conception to conclusion	S14; B4; B7; B9; B11; B12 Electrical and Instrumentation: NMCEi14 Pressure Management : NMCPM6 ; NMCPM9 Pipelines Maintenance : NPMC6 Emergency Response: NERC14; NERC18 **The following is ONLY applicable to Electrical and Instrumentation; Pressure Management and Pipelines Maintenance pathways:** • Using examples, critically reviews the role taken personally when leading a team in the undertaking of an on-site activity • Able to explain the benefits of working as a team on a job or project **The following is ONLY applicable to the Emergency Response Pathway:** • Using an example, critically reviews the role taken by self and others when working collaboratively as a team in the undertaking of an on-site activity • Able to explain the benefits of working as a team on a job, project or incident

Technical Interview Roles and Responsibilities

Role	Responsibility
Independent Assessor	Record and report assessment outcome decisions for each apprentice, following instructions and using assessment recording documentation provided by Energy & Environment Awards.
Employer Assessor	The employer must provide an appropriately qualified technical expert to attend the technical interview ideally this would be the employer assessor who carried out the practical task and completed the factual account to ensure accuracy of the apprentice's statements and to clarify any issues where requested by the independent assessor.
Employer/Training Provider	The technical interview must be scheduled with Energy & Environment Awards for a date and time which allow the apprentice to be well prepared. Ensure the apprentice has access to their logbook before and on the day of the technical interview.
Energy & Environment Awards	Arrange for the technical interview to take place, in consultation with the employer/training provider and independent assessor.

Component 1: Knowledge and Skills Assessment

The following grade boundaries apply to the knowledge and skills assessment:

Grade	Fail	Pass	Distinction
Grade Boundaries	≤ 34 marks	35 – 44 marks	45 – 50 marks

Component 2: Technical Interview based on the logbook grading combinations

The independent assessor who conducts the interviews, must combine the results of both session 1 and session 2 of the interview to determine the overall technical interview grade. A fail in either of the two sessions will result in a fail being awarded for the technical interview.

Technical Interview Session 1 (Practical Task) Grade	Technical Interview Session 2 (On-programme) Grade	Technical Interview Grade
Pass	Pass	Pass
Distinction	Pass	Pass
Pass	Distinction	Pass
Distinction	Distinction	Distinction

Overall grading

The apprenticeship will be graded distinction, pass or fail. The final grade will be determined by collective performance in the two assessment components.

In order to gain a pass, an apprentice must achieve a minimum of a pass in each EPA component. A pass represents full competence against the standard. To achieve a distinction grade, an apprentice must achieve a distinction in each EPA component.

The knowledge and skills test and technical interview are all marked separately and awarded a fail, pass or distinction.

The knowledge skills test is based on the percentage score achieved. The grade and mark for technical interview is based on the number and level of criteria achieved.

The overall grade for the Gas Network Craftsperson Standard is based on the grades in individual components as follows:

Knowledge and Skills Test Grade	Technical Interview Grade	Overall EPA Grade
Pass	Pass	Pass
Distinction	Pass	Pass
Pass	Distinction	Pass
Distinction	Distinction	Distinction

The scoring criteria that will be applied for each assessment criteria along with additional details can be found in Section 3 of this Specification.

The overall grading for the GNC standard is based on the grades in the individual components as follows:

- Distinction – If a Distinction is awarded in both components
- Pass – If a combination of a Pass or Distinction is awarded across both components
- Fail – if a Fail is awarded for at least one of the components

Section 4: Resits and retakes

Apprentices who fail one or more EPA components can re-sit or re-take the failed component at the employer's discretion. The apprentice's employer needs to agree that a re-sit or re-take is appropriate. A re-sit does not need further learning, but a re-take does. Apprentices should have a supportive action plan to prepare for a re-sit or a re-take.

The employer and Energy & Environment Awards agree the timescale for a re-sit or re-take. Failed knowledge and skills test must be re-sat or re-taken within the 6 month end-point assessment period, otherwise the EPA will need to be re-sat or re-taken in full.

A technical interview re-sit/re-take must be taken within three months of the fail notification, otherwise the whole EPA must be re-sat/re-taken.

Re-sits and re-takes are not offered to apprentices wishing to move from pass to a higher grade.

An apprentice will get a maximum EPA grade of pass for a re-sit or re-take unless there are exceptional circumstances confirmed with Energy & Environment Awards.

Energy & Environment Awards resit and re-take policy can be found at:
https://energyenvironmentawards.co.uk/policies-and-fees/

Section 5: Practical Guidance

Gas Network Craftsperson Practical Observation and Planning Form

Purpose

Energy & Environment Awards provide an optional Practical task(s) review service to assist with planning with planning for all employers/training providers with apprentices registered on this standard. To access the service, see Appendix D, GNC Supporting Documents 'Level 3 Gas Network Craftsperson Practical Observation and Planning Form.'

The purpose of the review service is to provide support in ensuring that the practical task(s), test facilities, necessary equipment, tools and examination conditions are in place to allow the practical task(s) to take place. The review helps ensure the proposed practical task(s) are sufficiently complex to allow the apprentice to demonstrate the required knowledge, skills and behaviours against the relevant elements of GNC specification. Details of the relevant elements are included in Section 2 of the Specification.

Tasks should be designed to allow variation to be introduced, reducing predictability.

Practical observation review must be conducted in either the workplace or a simulated environment that reflects the real working environment appropriate to the task(s) and risk involved. In the interest of safety, the systems used for the practical task purposes should be supplied with air and not fuel gas.

The employer/training provider must ensure:

- the practical observation enables the assessment of core and specific knowledge, skills and behaviours in a either the workplace or a simulated environment that reflects the real working environment
- it makes use of existing test facilities, which will be familiar to the apprentice and therefore allow them to perform at their best
- the equipment and tools are available

The employer/training provider must ensure that the practical task(s) is developed to allow the independent assessor to observe the apprentice synoptically demonstrate core and specific KSBs.

Submitting the form to Energy & Environment Awards

The employer/training provider should complete and submit the 'Level 3 Gas Network Craftsperson Practical Observation and Planning Form' to Energy & Environment Awards Service Delivery Team for approval 1 month before the Practical Observation. The form should be accompanied by photographs and/or video(s) of the plant, machinery, equipment areas, including practical tasks/briefs which the apprentice will be working on.

Energy & Environment Awards Review Process

Once the approval form has been received the review process will be conducted by Energy & Environment Awards. The outcomes will be shared with the employer/training provider no later than 5 working days following the review.

Please be aware:

- Practical task/briefs review does not guarantee that the apprentice will pass the practical task
- No health and safety risk assessment has been carried out by Energy & Environment Awards
- Energy & Environment Awards review does not remove any of the training provider obligations to ensure full coverage of the standard, and full compliance with relevant legislation
- Energy & Environment Awards review is based only on information supplied and is not a guarantee that the practical tasks/briefs, selected plant/machinery/equipment on the day of the practical will be sufficient for an EPA practical task
- The information provided in this Level 3 Gas Network Craftsperson Practical Observation and Planning Form must not be shared with the apprentice

Preparing for the Practical Observation

Where possible, the employer/training provider should provide the apprentice with the opportunity to carry out a practice practical observation as close to the real assessment described in Section 2 of the specification (Component 2).

The employer/training provider should prepare a practical task similar to (but not identical to) the tasks being used for the live assessment. A suitable person should be chosen to play the part of the assessor.

Templates are provided to help ensure that the activities observed during the practical observation will give complete coverage of the standard. See Appendix E, GNC Supporting Documents 'Practice Practical Tasks.'

Preparing for the Technical Interview

A practice technical interview should take place between the apprentice and the person acting the role of an assessor. The apprentice should draw on evidence from their logbook during the discussion.

Guidance on Logbook of Evidence

The logbook is not assessed. It serves the following purpose:

- Provides the opportunity to demonstrate the core and specific KSBs required across the standard
- The assessor reviews the logbook before the technical interview to help focus and contextualise their questions
- A carefully prepared mapped logbook supports the apprentice during the technical interview

Quality vs Quantity

The apprentice should be supported in selecting and mapping evidence for their logbook in the mapping document. They must gather evidence on the full range of KSBs required by the standard and be assessed on particular tasks or procedures or items of equipment during their practical observation.

The logbook must be sufficient to evidence the apprentice can apply the KSBs required in a variety of tasks.

In theory one comprehensive job-write up could cover all the required KSBs. In practice, this is more likely to be in several job write-ups plus a few smaller pieces of evidence targeting specific elements of the standard.

Choose the best pieces of evidence that have been mapped for each KSB covered by the technical interview based on the logbook. An independent assessor will look for one suitable piece of evidence for each KSB. To be confident of meeting the standard, apprentices should aim to have a minimum of two pieces of evidence, and no more than three, mapped to each KSB. This should ensure that the apprentice has quality evidence to draw on in the technical interview. Progress review documents should also be included.

What to include in the Logbook?

The logbook evidence:

- must be separated into two parts:
    - Part 1 must contain the practical task (post-gateway) factual account written by the employer assessor this will inform session 1 of the interview
    - Part 2 must contain evidence from the last 12 months of the on-programme training (pre-gateway) evidence which will inform session 2 of the interview
- must contain a mapping document where evidence is mapped against the KSBs. A template has been produced to help the apprentices with collecting and mapping their evidence. A copy of the template is included. See Appendix G, GNC Supporting Documents 'Logbook Mapping Document.'
- must contain **at least one piece of quality evidence relating to each KSB**. This piece of quality evidence must demonstrate the KSBs as outlined in Section 2 of this Specification which will be assessed by the technical interview based on the logbook
- must include evidence that **covers all KSBs** required
- **written accounts of activities** that have been completed and referenced against the knowledge, skills and behaviours supported by appropriate photographic evidence and work products, for example work instructions, safety documentation, company policies and procedures as appropriate to the activities
- **progress review documentation** - reviews which should be completed and recorded to determine progression towards competence across the entire occupational Standard

- will contain quality pieces of evidence
- will be available, during the technical interview, allowing the apprentice to refer to it
- must contain demonstrations of work carried out over a period and must include evidence of work carried out within the last three months of the on programme period
- must contain a minimum of 2 and no more than 3 activities carried out by the apprentice that demonstrates the higher order knowledge, skills and behaviours
- where practicable this should include:
    - photographs
    - images
    - diagrams
    - job descriptions and witness evidence/testimony
    - situations that have been difficult and challenging, and how these have been overcome e.g. equipment breakdown which has results in a change in working practice while still adhering to company procedures
    - any employer contributions must focus on direct observation of evidence (e.g. review/witness statements) of competence rather than opinions

The above is not a definitive list. The apprentice can include other relevant evidence sources. The logbook must not contain any methods of self-assessment.

Evidence must be:

- produced by the apprentice (authentic)
- relevant to the standard (K, S or B) that it is mapped to
- produced during the time the apprentice is carrying out their on-programme training

What can the apprentice do?

The apprentice should:

- be familiar with the structure of their logbook
- know the KSBs covered by the technical interview
- know the grading criteria

- ensure there is evidence to cover every KSB in the technical interview
- practise mapping evidence and completing the evidence mapping grid

The role of the employer/training provider

Employer/training providers are expected to support the apprentice in preparing their logbook by:

- clarifying responsibility for supporting the apprentice to select and map evidence for the logbook, including employer coaches/mentors where applicable
- advising on which pieces of evidence to select to ensure that when looked at as a whole, they provide coverage of all the required elements of the standard assessed in the technical interview
- supporting the mapping of evidence and production of a mapping document
- authenticating evidence as valid
- signing off the logbook
- submitting the logbook to Energy & Environment Awards as part of Gateway

What to expect in the practice technical interview?

The practice technical interview will be based on the logbook which will provide the apprentice with the opportunity to practice discussing their KSBs gained throughout their on-programme and by referring to the evidence from their logbook using the logbook mapping document. A suitable person should be chosen to play the part of the assessor.

A practice technical interview based on the logbook template is provided for use to prepare the appropriate questions to ask and to record the apprentices' performance. See Appendix F, GNC Supporting Documents 'Practice Technical Interview Template.'
As part of the practice exercise, apprentices should have access to their logbook to support their responses.

Preparing for the Knowledge and Skills Assessment

While on-programme, the employer and/or training provider should brief the apprentice on the areas to be assessed by the knowledge and skills assessment, as detailed in Section 2 in this specification. It is good practice to identify the areas within the learning programme where the relevant knowledge is delivered, ensuring that apprentices are aware that elements of these might come up in the test.

The knowledge test is aligned to the standard rather than a specific job role that the apprentice may be doing. The questions have been written to reflect the Gas Network Craftsperson role as a whole and not focussed on specific plant, machinery, or employer-specific processes.

In readiness for end-point assessment, the apprentice should complete a practice knowledge and skills assessment. This should be undertaken in advance of the live knowledge and skills assessment, with enough time to mark the test, and provide feedback to the apprentices. See Appendix C, GNC Supporting Documents ‘Practice Knowledge and Skills Assessment.’

For maximum effect, ensure the test is taken in exam conditions similar to those that will be experienced in a live test.

Section 6: Authenticity and security of apprentice work

The apprentices must be advised by their training provider and employer that copying of any work (whether it is from another apprentice or from internal, external documents or source) and presenting it as their own will be deemed as malpractice and will lead to their work being disqualified. Apprentices must not share their work or allow any person to copy their work as this is not allowed and would also be deemed as malpractice.

In signing off the logbook, training providers and employers must be satisfied that the evidence in the logbook is:

- **adequate**: evidence must cover all relevant KSBs within the assessment plan. Adequate does not mean a large quantity of evidence. The evidence should focus on quality rather than quantity
- **authentic**: apprentices must be able to confirm and talk about the evidence that they submit with the independent assessor, appointed by Energy & Environment Awards. It is vitally important apprentices only submit evidence relating to them
- **appropriate**: all evidence must be relevant to the KSBs assessed during the technical interview
- **recent and up to date**: all evidence must be linked to KSBs must be recent and current which demonstrate the apprentice's competence. The independent assessors, appointed by Energy & Environment Awards will assess current competencies, and the apprentice must map the evidence to demonstrate the relevant work to the KSB. Apprentices must gather the evidence during their on-programme training