Level 2 End-Point Assessment for Gas Network Operative

EPA Specification Section 5.2 – The Practical Assessment with Questioning

- Introduction
- Preparing for the Practical Assessment
- Preparing for Questioning
- Practical Assessment and Questioning Grading
- Criteria and Grading

Contacts

This specification has been designed to provide all the advice and guidance you need to prepare yourself and your apprentices for end-point assessment. However, if you have any further questions please contact the EUIAS Help Desk using one of the following:

Help Desk email: enquiries@euias.co.uk

Help Desk telephone: 0121 713 8310

Introduction

Apprentices will complete a set practical task or a series of practical tasks in a simulated environment. The simulated environment must closely relate to their natural working environment. During the practical task(s) the independent assessor will ask questions to confirm the apprentices underpinning knowledge, skills, behaviours, and their understanding of the rationale for actions taken and choices made during the practical task(s). The content of the practical task(s) and questioning will relate to the gas network operative's role. The duration of this activity will typically be no longer than 12 hours. 11 hours will be dedicated to completing the practical assessment and one hour for the questioning. The questioning will take place after the practical assessment, this can be split across a maximum of 2 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. The EUIAS will provide the performance criteria and the recording documents for the tasks. Through consultation with the employer and training provider, the EUIAS will ensure sufficient complexity to allow the apprentice to demonstrate the required knowledge, skills, and behaviours in an integrated way, which will test:

- Knowledge (K2.i, K4, K5.i, K8 and K12)
- Skills (S1, S2, S3, S4, S5, S6, S7, S8, S9.i, S10, S11, S15, S16, S17, S18, S19, S20, S21, S22, S23, S24, S25, S26 and S27)
- Behaviours (B1, B4, B5 and B6)

See Section 4 for the references to the standard.

EUIAS will work with the employer and or training provider to approve the practical assessment briefs, ensuring they relate to the EUIAS practical assessment specifications and ensuring that they are sufficiently complex to allow the apprentice to demonstrate the required knowledge, skills and behaviours required of the GNO apprenticeship standard. Refer to section 6 for guidance on how to set up a practical assessment and practical assessment briefs.

The duration of the practical assessment is 12 hours with one hour +10% allocated for questioning, and the actual time allowed will be based on the comparable time that an industry competent worker would take to achieve successful completion of the set task(s). The practical assessment will be delivered and assessed by the EUIAS independent assessor under strict controlled conditions.

The apprentices should be made aware and should confirm their understanding of the requirements of the grading criteria in order to achieve their full potential in achieving a pass and distinction. If the apprentice does not achieve a 'pass' the apprentice will need to retake this EPA element, further information can be found in Section 5 'Retake and Resit Information'.

The EUIAS Service Delivery team will work with the employer or training provider to schedule the practical assessment with questioning.

Grading the Practical Assessment with Questioning

The practical assessment with questioning is graded a distinction, pass or fail. The grading criteria is described in the following pages.

All pass criteria must be achieved in order to achieve a pass.

All pass and distinction criteria must be achieved in order to achieve an overall grade of a distinction.

Practical Observation with Questioning Assessment Grading

The practical assessment with questioning is graded by the independent assessor appointed by EUIAS. The following tables explain the criteria that is applied in order to achieve each grade for the practical assessment with questioning.

To achieve a **PASS** for the practical assessment with questioning, a Pass is required in **ALL** relevant criteria:

Knowledge	K2. i	K4	K5. i	K8	K12
All Pass criteria must be achieved	✓	✓	✓	✓	✓

Skills	S1	S2	S3	S4	S5	S6	S7	S8	S9.i	S10	S11	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S25	S26	S27
All Pass criteria must be achieved	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Behaviours	B1	B4	B5	B6
All Pass criteria must be achieved	✓	✓	✓	✓

Achieving all these elements represents a total score of a pass or fail in the Practical Observation with Questioning Assessment.

To achieve a **Distinction** for the practical assessment with questioning, the appren**tice must** achieve all Pass criteria PLUS the Distinction criteria as listed below:

Knowledge	K5. i	K8	K12
All Pass criteria must be achieved	✓	✓	✓

Skills	S2	S3	S9.i	S10	S15	S16	S17	S18	S19	S20	S21	S22	S23	S24	S27
All Pass criteria must be achieved	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Behaviours	B5
All Pass criteria must be achieved	✓

Practical Observation with Questioning Assessment Grade	Minimum Criteria Achieved
Pass	All Pass criteria
Distinction	All Pass criteria and Distinction criteria

Indicative ‘pass’ criteria for the Practical Assessment with Questioning

The following criteria are indicative of the pass criteria the assessor will be looking for when the apprentice carries out the practical assessment with questioning.

Standard	Indicative Pass Criteria
K2.i Health and safety standards, regulations, and practice, including risk assessments and safe systems of work, permits to work, working in confined spaces, personal protective equipment (PPE), manual handling	• Identification of hazards and risks associated with a task, identification and implementation of control measures, purpose of a risk assessment • The purpose of a Permit to Work, understanding of content, need for compliance • Hazards and risks associated with a confined space, control measures, safe working practices • Understanding of the purpose and correct use of various items of personal protective equipment including breathing apparatus and gas detection equipment, know the limitations, and not to modify • Risks and safe working practices for associated with manual handling, ways of minimising risk

Standard	Indicative Pass Criteria
K4 Principles and processes that underpin the location of gas utility network assets, including health and safety guidance on avoiding damage to underground utility services	• Hazards associated with underground utilities, including cables, pipes, drains, sewers, ducts • Need to avoid damage to underground utilities, potential consequences of damage • Correct operation of plant detection equipment, safe working practices, calibration, limitations • Use of plans, interpretation • Marking of tracings • Actions to take if damage occurs or is identified
K5.i Checks and operation requirements for commonly used gas utility network operations equipment and tools, for example utility location equipment/tools, pneumatic gun, hand/power tools – power disc cutter, chain saw, drills	• Hazards and risks associated with power tools and equipment • Selection and safe use and operation of power tools and equipment, limitations • Requirement for pre-use checks • Requirements for maintenance and calibration • Action to take if faulty equipment is identified • Action to take if faulty equipment is identified
K8 Procedures for the construction, testing, purging, repair commissioning and decommissioning of gas network assets	• Procedures for the construction, testing, purging, commissioning, and decommissioning of gas services (at low pressure and medium pressure), including transfers, mains connection, house entry, service termination, methods of construction (open cut, dead

Standard	Indicative Pass Criteria
	insertion, live insertion, moling), hazards and risks • Procedures for the construction, testing, purging, commissioning, and decommissioning of gas mains (at low pressure and medium pressure), including jointing methods, connections, methods of construction (open cut, dead insertion, live insertion), hazards and risks • Procedures for flow stopping mains at low pressure and medium pressure, including squeeze off, bag stop, hazards and risks
K12 Communication techniques – written, verbal; customer service techniques	• Effective means of communications, written, verbal • Requirements for documented records • Effective customer service
S1 Identify hazards and implement controls to reduce risks	• Identification of risks • Application of risk assessment • Implementation of control measures
S2 Interpret work instructions, engineering instructions and determine actions	• Identification and application of relevant and appropriate procedures for the task
S3 Identify and organise resources to undertake activities	• Identification of tools, equipment, materials, and consumables needed for the task • Preparation of resources needed for the task

Standard	Indicative Pass Criteria
S4 Comply with workplace health, safety & environmental policy, and practice, including use of Personal Protective Equipment (PPE) and safety equipment	• Identify and wear PPE appropriate for the task • Work safely throughout the task • Minimise waste and dispose of waste correctly
S5 Set out signing, lighting, and guarding	• Identify and implement signing, lighting and guarding requirements for the scenario in line with the "Red Book"
S6 Excavate holes for gas utility network services	• Apply safe excavation techniques and avoidance of underground plant • Size excavations appropriate for the task • Demonstrate safe storage of excavated materials
S7 Monitor and maintain site conditions, including good housekeeping	• Take care of tools equipment and materials • Maintain a safe and tidy work site/area • Dispose of waste appropriately
S8 Identify, locate, and avoid utility supply apparatus and sub-structures	• Use and interpret site plans to identify the presence of underground plant • Use plant detection equipment correctly • Mark the location of tracings
S9.i Check and operate equipment and tools; report faults if required	• Undertake pre-use checks of equipment to ensure they are safe to use and fit for purpose • Identify and correctly report any faults with tools and equipment

Standard	Indicative Pass Criteria
	• Correctly use equipment and tools in a safe manner
S10 Communicate with colleagues and or stakeholders, for example, statutory agencies and members of the public, customers	• Agree with others the actions to be taken • Update others on progress and upon completion
S11 Use breathing apparatus	• Prepare the breathing apparatus ready for use • Put on the breathing apparatus correctly • Test the apparatus prior to use • Use the breathing apparatus effectively whilst undertaking a task • Remove, clean, and store the breathing apparatus
S15 Construct new and replacement gas services to internal and external service termination positions using a range of techniques	• Install new or replacement service pipe by open cut, dead insertion or live insertion • Connect a PE service to a PE main • Drill and tap a metallic main • Connect a PE service to a metallic main • Install a service termination at an external meter box • Install a service termination at an internal meter position
S16 Carry out squeeze off activities on gas services (low and medium pressure)	• Correctly apply a squeeze off to services operating at low pressure and medium pressure • Ensure the flow of gas has been stopped
S17 Construct new and replacement gas mains using a range of techniques	• Install new or replacement service pipe by open cut, dead insertion

Standard	Indicative Pass Criteria
	or live insertion
S18 Carry out flow stopping on gas mains by use of squeeze off and bag stop	• Prepare a PE main for flow stopping by squeeze off, ensuring security of supply • Correctly apply squeeze off • Ensure the flow of gas has been stopped by squeeze off • Release squeeze off after operation and mark the main • Prepare a metallic main for flow stopping by bag stop, ensuring security of supply • Correctly install bag stop equipment in main • Ensure the flow of gas has been stopped by the bag stop • Correctly remove the bag stop equipment from the main and install plugs
S19 Disconnect gas meters	• Install continuity bonds • Remove meter, cap and store safely
S20 Repair gas assets including valves and fittings using a range of techniques	• Make a temporary repair to main or service to stop an escape • Correctly install a leak clamp over a hole in a pressurised main so that it seals the escape • Correctly apply anaerobic sealant to a leaking joint on a main • Tighten up joints on a leaking flange or valve to stop a leak • Test pipework to ensure repair has been successful
S21 Join materials by electro-fusion	• Correctly join two sections of service pipe using electrofusion,

Standard	Indicative Pass Criteria
	including cleaning of pipe ends and alignment, and ensure effective fusion • Correctly join two sections of PE main using electrofusion, including cleaning of pipe ends and alignment, and ensure effective fusion
S22 Join materials by butt fusion processes	• Prepare pipe for butt fusion. • Correctly use butt fusion equipment to make an effective joint. • Check the bead for joint quality
S23 Exchange emergency control valve	• Correctly use a recognised technique to replace an emergency control valve • Test to ensure it is not leaking
S24 Test gas network assets at low and medium pressure	• Correctly apply a pressure test to a service at low pressure and medium pressure • Correctly apply a pressure test to a main operating at low pressure • Take records and complete appropriate documentation for the test
S25 Purge, commission and decommission gas network assets	• Correctly demonstrate the safe severing of a service using a recognised technique • Correctly demonstrate the purging of a new or replacement service • Verify the effective commissioning of a new or replacement service • Correctly demonstrate the purging of a section of main • Verify the effective commissioning of a new or replacement section of main

Standard	Indicative Pass Criteria
S26 Apply gas network emergency procedures, including the analysis of gas readings	• Demonstrate an approach to safeguard life and property, including evaluation of need to evacuate customers • Demonstrate the correct use of gas detection equipment • Correctly interpret gas readings and subsequent actions required • Correctly complete documentation with records of findings
S27 Apply water extraction techniques for gas mains and services	• Demonstrate the correct use of equipment to extract water from a gas service • Demonstrate the correct use of equipment to extract water from a main • Check properties which might be affected to ensure their supply is not affected • Demonstrate the correct disposal of extracted water
B1 Prioritises health, safety and environment when undertaking work to safeguard life and property	• Wears correct Personal Protective Equipment (PPE) for the task, including breathing apparatus and gas detection equipment • Identifies correct reasons why the PPE that they are using is needed • Conducts work in line with safe systems (method statement), for example uses safety equipment, correct storage of materials • Sets out signing, lighting, and guarding to meet task requirements • Monitors and maintains site conditions, keeps work environment tidy and organised, for example storage of tools when not in use, no litter, no hazards • Explains the implications of non-compliance with relevant health and safety standard, regulations, and practice

Standard	Indicative Pass Criteria
	• Provides an example of how they have prioritised health and safety in the task • Uses breathing apparatus at appropriate times and in line with instructions for use and safety guidelines • Demonstrate an approach to a public reported escape which safeguards life and property • Provides an example of how they have prioritised health and safety in the task
B4 Professional, for example punctual, trustworthy, polite, courteous, presentable, maintains security of business specific and personal data, takes account of equality and diversity in interactions	• Wears work attire accordingly to company specific requirements • Polite and respectful, for example uses appropriate language, adapts communication to the needs of the audience
B5 Self-motivated, for example manages own time effectively, takes responsibility to complete the job	• Identifies job task requirements; seeks clarification where necessary • Plans tasks; there is a rationale for sequence of work followed • Identifies and organises the correct resources, including tools and equipment for tasks • Completes tasks in allocated time • Takes responsibility to complete the tasks, for example completed action within limits of authority without direction

Standard	Indicative Pass Criteria
B6 Pride in work, for example works to agreed quality targets and standards	• Evidence of quality agreed targets and standards • Examples of quality work undertaken and feedback

Indicative grading criteria for Distinction for the Practical Assessment with Questioning

The following criteria are indicative of the Distinction criteria the assessor will be looking for when the apprentice carries out the Practical Assessment with Questioning.

Indicative Distinction Criteria	Relevant elements of the standard where the criteria may be demonstrated
D1 - Determine action and organise tasks • Preparation optimises use of time, for example grouping tasks for efficiency, multi-tasking • Justifies their choice of equipment and tools over alternative choices to meet the job task requirements	S2, S3 and B5
D2 - Check and operate tools and equipment • Analyses and explains the potential consequences of not undertaking equipment/tool checks and not following manufacturers and company specific method statement, for piece of equipment and or tool as identified by the Independent Assessor	K5.i and S9.i
D3 - Communicate • Explains how and why they would adapt the communication methods used when presented with a	K12 and S10

Indicative Distinction Criteria	Relevant elements of the standard where the criteria may be demonstrated
different audience as identified by the independent assessor	
D4 - Construct, repair, commission, decommission of gas network assets • Completed tasks are of high quality, for example, right first time; balances safety with the need to work effectively and efficiently, mitigating inconvenience to members of the public/stakeholders • Evaluates completed work and suggest how improvements could have been made, for example in terms of efficiency, effectiveness, safety and this list is not exhaustive	K8 S15 S16 S17 S18 S19 S20 S21 S22 S23 S24 S27