ENERGY & UTILITIES
INDEPENDENT
ASSESSMENT SERVICE

EPA Specification

Gas Network Operative

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Level 2 End-Point Assessment for Gas Network Operative

EPA Specification Section 1 – Introduction

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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

About the Energy and Utilities Independent Assessment Service (EUIAS)

The EUIAS is an independent End-point Assessment organisation (EPAO) approved by the Education and Skills Funding Agency (ESFA) (number EPA0009) to offer and carry out the end-point assessments (EPA) for the Level 2 Gas Network Operative Apprenticeship Standard (ST0204). This Specification relates to Assessment Plan ST0204/AP03.

The EUIAS was established in 2014 and is part of Energy & Utility Skills Limited. The EUIAS delivers rigorous and robust apprenticeship end-point assessment services for the energy and utilities sector, and for technical and safety-critical sectors. In May 2016, The EUIAS became the first end-point assessment provider to have achievers on the English Trailblazer apprenticeship standards.

About End-point Assessment

End-point assessment is the term given to the assessments taken by apprentices at the end of their apprenticeship, and which must be passed in order for the apprentice to be awarded a certificate of achievement. Apprentices must be trained by training providers approved by the ESFA and their end-point assessments must be carried out by an EPAO approved by the ESFA. The assessment is designed, delivered, assessed and quality assured by the EPAO, with further external quality assurance provided by an external quality assurance (EQA) provider.

The EPA typically consists of three assessment components each of which must be passed in order to achieve an overall pass. For the Gas Network Operative Standard, the assessments are a multiple choice test, a practical assessment with questioning and an interview underpinned by portfolio of evidence.

End-point assessment is based on two documents that have been written by an employer group – the Standard and the Assessment Plan, both of which can be found on the website of the Institute for Apprenticeships and Technical Education, www.instituteforapprenticeships.org.

The EPAO designs the assessments to cover the standard, while complying with the assessment plan. It is important for training providers supporting apprenticeships:

- to ensure their training programmes cover all the elements required by the standard
- to have access to suitable premises, plant, machinery, and equipment for the practical assessment

How to Use this EPA Specification for Gas Network Operative

Welcome to the EUIAS EPA Specification for the Gas Network Operative (GNO) Apprenticeship Standard.

The EUIAS internally quality assures all end-point assessments in accordance with its IQA process and IfATE requirements. This standard is externally quality assured by IfATE.

This Specification is available from the EUIAS website (www.euias.co.uk) as a complete document, and also in its individual sections to allow customers to download what they require. Important: the web site will always contain the latest version of this document so please check back to ensure you are using the latest version.

This Specification outlines what you need to know about the end-point assessments for this standard and provides details of the on-programme delivery requirements. It provides advice and guidance for trainers on how to prepare apprentices for the end-point assessment.

The Specification provides end-to-end details of the how the EUIAS works with customers, from initial engagement to the completion of end-point assessment.

Audience:

Section 2 will be of interest mainly to the external quality assurance body to ensure the assessment methods cover the standard.

Section 3 will be of interest mainly to administrators and those responsible for planning and scheduling end-point assessments.

Section 4 will be of interest to those ensuring that apprentices have covered all the required elements of the standard during their apprenticeship, and to apprentices themselves.

Sections 5 and 6 will be of interest to those who support apprentices in preparing for the end-point assessments, and to apprentices themselves.

At a glance

Apprenticeship standard: Gas Network Operative

Assessment Plan: ST0204/AP03

Level: 2

On-programme duration: Typically 24 months

Grading: Pass or Distinction

End-point assessment duration: Typically 6 months

End-point assessment methods:

- Multiple Choice Test
- Practical Assessment with questioning
- Interview underpinned by portfolio of evidence

Quality Assurance:

Quality assurance of the end-point assessment is designed in accordance with the Assessment Plan. The main features of EUIAS quality assurance are:

- Assessments carried out by assessors standardised by EUIAS
- Ongoing internal quality assurance
- Moderation and final grading by EUIAS

External quality assurance is provided by the IfATE.

In this guide, you will find:

- Detailed amplification and guidance of the standard and guidance on how to prepare the apprentice for gateway
- Detailed information on which part of the standard is assessed by which assessment method
- A section focused on the end-point assessment method where the assessment criteria are presented in a format suitable for carrying out practice assessments
- Suggestions on how to prepare the apprentice for each part of the end-point assessment
- A practice test that you can use with apprentices

Is this the right standard for you?

The Gas Network Operative standard has been designed by the trailblazer group of employers and this occupation is found in the utilities sector, in the gas transportation industry.

A substantial part of the assessment activity is the practical assessment with questioning where the apprentice competently demonstrates their skills required to perform their job role. It is important that the setting provides the opportunity to cover all the requirements of the standard. It is essential that the employer and provider check that they have the right site with the right opportunities for the apprentice to cover all the requirements of the assessment. The apprentice will not be assessed on the job that they do but on the requirements of the standard.

Standard overview

The purpose of the Gas Network Operative occupation is to construct, maintain and repair gas network infrastructure to provide a reliable supply and service to domestic, commercial, and industrial users. The infrastructure for gas transportations includes mains and services operating at below 7 bar pressure, including excess flow values emergency control valves, pipes, network valves, top tee and encirclement fittings and branch saddles.

The Gas Network Operative would be expected in their job role to are expected to:

- Ensure the site is safe for work and members of the public, which may include traffic management and control
- Complete site excavation and on job completion, restore the site to a safe condition
- Must use a range of powered equipment, hand tools and plant on-site, for example diggers, rollers and forklifts
- Must respond to gas network infrastructure emergencies, for example gas escapes, in line with procedures and escalating as appropriate is all part of the role
- Must record and report on work completed is important, which may include completion of paperwork or computerised records, drawings and providing site photographs
- Depending on the work required, the operative may spend the day at one site or work across a number of sites. Work locations may include new build sites, public highways, and domestic, industrial and commercial properties
- Work in all weather conditions. They may need to work shifts, standby and unsociable hours.
- Company procedures are a major part of how the operative will operate. All activities are governed by specific company procedures. The operative must follow company procedures, which is a major part of how the apprentice will operate. Each organisation will have their own company procedures

In their daily work the gas network operative is expected to:

- Interact with colleagues, such as managers, network technicians and engineers, delivery drivers, reinstatement teams and administration staff
- Work in a small team - typically with one or two other operatives, responsible for their own work, reporting to managers but not under direct supervision
- On site interact with site agents and other trades
- Communicate with clients and or customers regarding work that is being undertaken and, in some situations, the general public.
- Liaise with personnel from statutory authorities, such as the Highways Authority, local authorities and the Environment Agency
- In emergency situations liaise with emergency services personnel

An employee in this occupation will be responsible and expected to:

- Complete work to the required standard, following procedures, ensuring Health & Safety and regulatory compliance with OFGEM (Office of Gas and Electricity Markets), Institution of Gas Engineers and Managers (IGEM) standards and Environment Agency and others failure to do so could have serious consequences for self, public health and the environment.
- Present a professional image of the company
- Be responsible for ensuring their tools and equipment are fit for use and inspected prior to use, correctly stored, and maintained
- Lead a team but this will depend on their level of experience

Gas network operatives need to be:

- Qualified and on the Street Works Register
- Hold a valid driving license which is typically required, as operatives may be expected to drive to their place of work, using a company vehicle

Some gas network operatives may require:

- A CSCS (Construction Skills Certification Scheme) Card and or SHEA (Safety, Health and Environmental Awareness) Gas Passport Card
- A Disclosure and Barring Service (DBS) check

On-programme requirements

The employer or training provider should ensure that they have developed and can deliver a programme of training and learning that will enable the apprentice to develop the knowledge, skills and behaviours that will be assessed as part of this standard. The programme must cover all the knowledge, skills and behaviours of the standard.

The planning, organisation and delivery of the on-programme element of the apprenticeship is the responsibility of the employer or training provider and it is their responsibility to ensure they are compliant with all applicable regulations.

The programme of training for the gas network operative must be completed before being entering gateway and must include:

- Achieved Level 1 English and Mathematics
- Network Construction Operations (Gas) Level 1 qualification, as a minimum

For all roles it is recommended that throughout the period of learning and development, and at least monthly' the apprentice should meet with their training provider or employer to record their progress against the standard. At these reviews, the employer should:

- set learning and development goals
- track the apprentice's progress
- coordinate 20% of the apprentice's time being spent in off-the-job training

The employer must satisfy themselves that the apprentice:

- has developed and demonstrated the knowledge, skills and behaviours as specified in the standard
- can successfully demonstrate their ability to work safely and competently as a gas network operative

Once the apprentice is deemed competent, the relevant section(s) of the standard should be signed off by the on-programme assessor and employer.

Readiness for end-point assessment

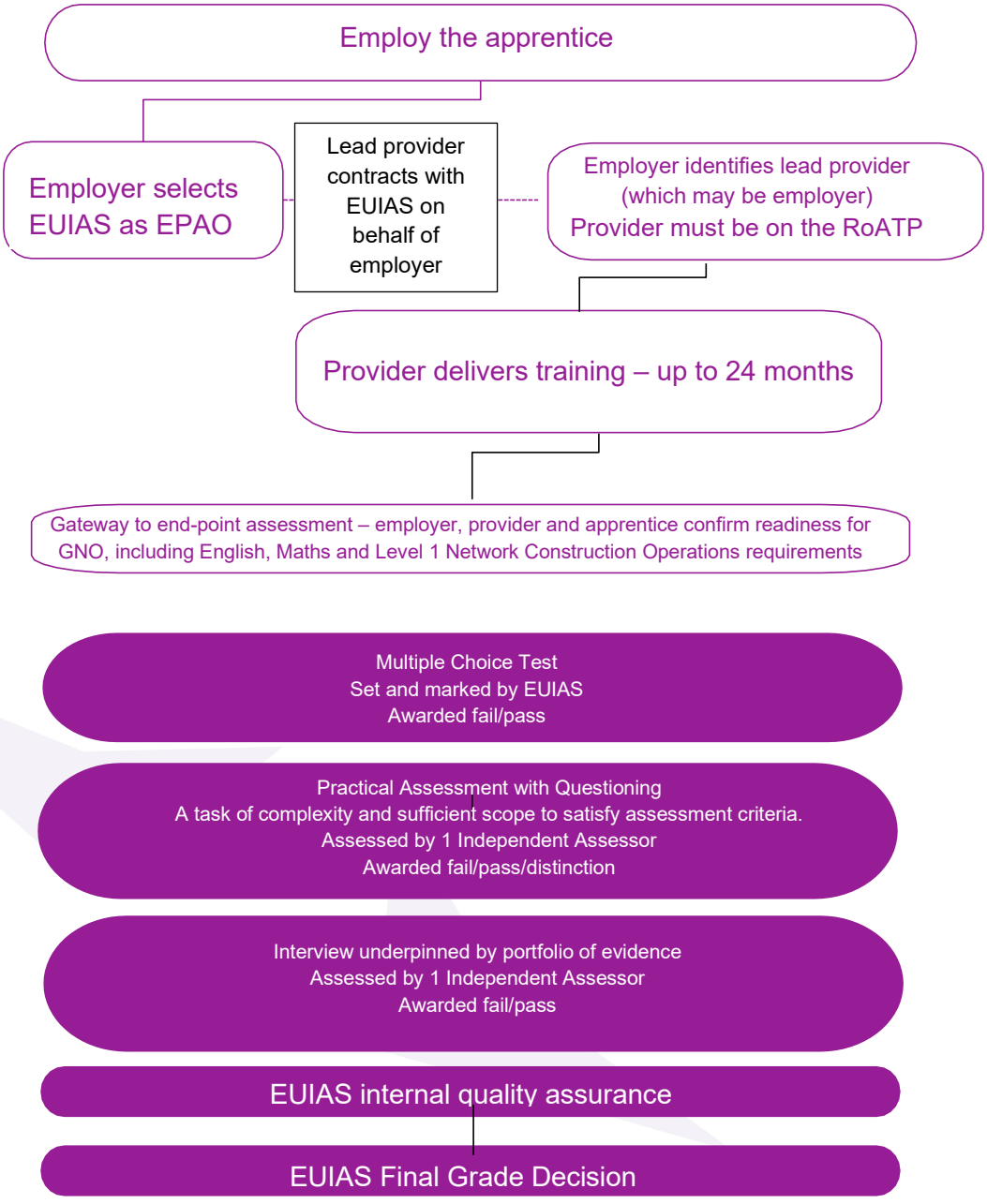
The apprentice must satisfy all requirements of the final gateway before entering end-point assessment:

- Achievement of Level 1 English and Mathematics
- Those with 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
- Apprentice has compiled a portfolio of evidence, which will underpin the interview
- The employer, training provider and apprentice must be confident that the apprentice has developed all the knowledge, skills and behaviours defined in the apprenticeship standard. To ensure this, the apprentice must attend a formal meeting with their employer to complete the Gateway Eligibility Report
- The apprentice and the employer must engage with the Service Delivery team at EUIAS to agree a schedule for each assessment activity to ensure all components can be completed within a 6-month assessment window. Further information about the gateway process in Section 3

- The employer, training provider and apprentice must be confident in ensuring that all EPA assessment completed documentation is uploaded to the EUIAS system as instructed by the Service Delivery Team
- Network Construction Operations (Gas) Level 1 qualification, as a minimum

Order of end-point assessments

The successful completion of the multiple choice test, practical assessment with questioning, **must** precede the interview underpinned by portfolio of evidence. The multiple choice test and practical assessment with questioning may take place in any order, although the EUIAS will usually schedule the multiple choice test first to allow time for any re-takes that may be needed. The final component is the interview underpinned by portfolio of evidence. This will take place face to face and it will be recorded. Both the practical assessment with questioning and the Interview underpinned by the portfolio of evidence will be conducted by the Independent Assessor (IA).



Overview of the EPA process – EPA-related activities in purple

Level 2 End-Point Assessment for Gas Network Operative

EPA Specification Section 2 – Mapping the Standard

Contacts

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Purpose

The purpose of this section is to introduce the elements of the standard and the referencing system used by the EUIAS. It provides and 'at-a-glance' view of which parts of the standard are assessed by which assessment method.

The Standard

The standard is divided into:

- Core Knowledge
- Core Skills
- Core Behaviours

Core Knowledge:

K1 Utility industry structure and regulatory requirements, including the Gas Act and regulatory surveys

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

K2.ii Health and Safety at Work Act, New Roads and Street Works Act, working at heights, Provision and Use of Work Equipment Regulations (PUWER), Control of Substances Hazardous to Health (COSHH), Lifting Operations Lifting Equipment Regulations (LOLER), first aid, fire safety, asbestos awareness

K3 Environmental regulatory requirements: Environment Protection Act, disposal of waste and recycling

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

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

K5. ii Maintenance and storage 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

K6 Principles of traffic management and control. K9 Procedures for gas network emergencies

K7 Excavation techniques, for example, open cut, moling, vacuum extraction. Trench support for example, proprietary systems, sheeting and mechanical

K8 Procedures for the construction, testing, purging, repair commissioning and decommissioning of gas network assets

K9 Procedures for gas network emergencies

K10 Electrical safety, including equipotential bonding

K11 Emergency services and statutory authorities – local authorities, highway authorities and Environment Agency; who they are, what they do; escalation procedures

K12 Communication techniques – written, verbal; customer service techniques

K13 Reporting channels; limits of authority

K14 Equality & diversity considerations in the workplace. K15 Data – purpose and protection, for example asset records

K15 Data – purpose and protection, for example asset records

K16 Information technology, for example to support an accurate audit trail using electronic equipment including handheld and mobile devices

Core Skills:

S1 Identify hazards and implement controls to reduce risks

S2 Interpret work instructions, engineering instructions and determine actions

S3 Identify and organise resources to undertake activities

S4 Comply with workplace health, safety & environmental policy, and practice, including use of Personal Protective Equipment (PPE) and safety equipment

S5 Set out signing, lighting, and guarding

S6 Excavate holes for gas utility network services

S7 Monitor and maintain site conditions, including good housekeeping

S8 Identify, locate, and avoid utility supply apparatus and sub-structures

S9.i Check and operate equipment and tools; report faults if required

S9.ii Maintain and store equipment and tools

S10 Communicate with colleagues and or stakeholders, for example, statutory agencies and members of the public, customers

S11 Use breathing apparatus

S12 Use gas detection equipment

S13 Carry out trench installation for example, sheeting, lightweight and proprietary systems

S14 Record information, for example job reports, time sheets

S15 Construct new and replacement gas services to internal and external service termination positions using a range of techniques

S16 Carry out squeeze off activities on gas services (low and medium pressure)

S17 Construct new and replacement gas mains using a range of techniques

S18 Carry out flow stopping on gas mains by use of squeeze off and bag stop

S19 Disconnect gas meters

S20 Repair gas assets including valves and fittings using a range of techniques

S21 Join materials by electro-fusion

S22 Join materials by butt fusion processes

S23 Exchange emergency control valve

S24 Test gas network assets at low and medium pressure

S25 Purge, commission and decommission gas network assets

S26 Apply gas network emergency procedures, including the analysis of gas readings

S27 Apply water extraction techniques for gas mains and services

Core Behaviours

B1 Prioritises health, safety and environment when undertaking work to safeguard life and property

B2 Adaptable, for example willing to accept changing priorities and working requirements

B3 Team player, for example keeps others informed, recognises personal and professional limitations, and seeks advice when necessary

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

B5 Self-motivated, for example manages own time effectively, takes responsibility to complete the job

B6 Pride in work, for example works to agreed quality targets and standards

B7 Customer focus, for example keeps customers informed

B8 Committed to continued professional development

The Knowledge, Skills and Behaviours statements are assessed in the End-point Assessment elements as follows.

Multiple Choice Test	Core Knowledge (K1, K2.ii, K3, K6, K9, K10, K11, K14 and K15)
Practical Assessment with Questioning	Core Knowledge (K2.i, K4, K5.i, K8 and K12)
	Core Skills (S1, S2, S3, S4, S5, S6, S7, S8, S9.i, S10, S11, S15, S16, S17, S18, S19, S20, S21, S22, S24, S25, S26 and S27)
	Core Behaviours (B1, B4, B5 and B6)
Interview Underpinned by Portfolio of Evidence:	Core Knowledge (K5ii, K7, K13 and K16)
	Core Skills (S9ii, S12, S13 and S14)
	Core Behaviours (B2, B3, B7 and B8)

Level 2 End-Point Assessment for Gas Network Operative

EPA Specification Section 3 – Service Delivery and Gateway Eligibility

- EUIAS Service Delivery
- How to prepare for gateway
- The Gateway meeting
- Timeline

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Help Desk email: enquiries@euias.co.uk

Help Desk telephone: 0121 713 8310

EUIAS Service Delivery

Whether you are an employer or a training provider (or both) your initial engagement will probably be with a business development manager who will introduce you to this document and take you through the EPA service that we offer. Our aim is to make the experience as straightforward and easy to engage with as possible.

The key to a successful EPA experience is early identification of requirements to enable proper planning to take place and this section explains the requirements for preparing for the Gas Network Craftsperson (GNO) EPA.

All the requirements discussed below are important, but some of them are critical, in particular the Gateway Eligibility Requirements. It is important to note that the end-point assessments cannot proceed without the Gateway Eligibility requirements being met. A completed Gateway Eligibility Report with supporting documents is required for each apprentice before EPA.

The EPA Window

All end-point assessments have a 'window' during which the end-point assessment must be completed, to avoid apprentices 'timing out'. The EPA window for the GNO Standard three months. The EPA window for each apprentice commences on the date they take the first element of their EPA, for example, the day of the multiple choice test. All EPA activities must be completed within this 3 month window and EUIAS will work with you to schedule the EPA as close to the beginning of the window as possible to allow for re-sits if necessary.

Service Level Agreement (SLA) and Cohort Registration Form

EUIAS uses three documents to capture the details of the end-point assessment agreement:

- Service Level Agreement form – signed by the lead provider
- Cohort Registration form – signed by and the lead provider; this form identifies the apprentices in the cohort

Initial Engagement

Initial engagement with EUIAS will usually take place well before the EPA is due to take place and sometimes before the apprentices start their programme. The initial engagement meeting will cover:

- The numbers of apprentices in the cohort
- Any Reasonable Adjustments you want to apply for
- The expected date(s) of EPA
- The employer and or lead provider for each apprentice
- Completion of the Service Level Agreement
- Arrangements for 'site review' to confirm that the proposed locations and requirements for the assessments:
    - The location and invigilation of the multiple choice test
    - The location of the practical assessment and questioning provides opportunities for the apprentice to cover the standard. The practical assessment will involve the apprentice

undertaking a set task. The adapted task must be appropriate

- The location of the Interview underpinned by portfolio of evidence

Further details of the assessment methods are in Section 5 of this EPA Specification.

The EUIAS operates a two-stage payment schedule:

- Stage One applies at the registration stage when the initial registration fee is due
- Stage Two applies at Gateway, when the balance of the agreed fee is due

During the initial engagement, we will also cover the support that is available for the employers and or training providers. We are confident that most, if not all the answers you need are contained within this Specification, but we are always available to provide answers to specific queries using the Help Desk email enquiries@euias.co.uk

Appointment and Registration

The appointment stage is the first formal stage of working with EUIAS. This stage must involve both the employer and the training provider (if applicable).

Successful appointment involves the completion of the Cohort Registration Form, officially appointing EUIAS as the EPAO for this cohort. The form contains

- Details of the training provider (if applicable)
- Confirmation of learner numbers and names
- Confirmation of expected EPA dates
- Confirmation of the level of service agreed with EUIAS, with pricing
- Confirmation that you will give a minimum of three months' notice of apprentices being ready for EPA (especially important if you bring forward the completion date)
- Signatures from training provider
- A purchase order from the lead-provider to EUIAS to the value agreed

If it has not already taken place, the details of the EPA will be discussed (as described in the Initial Engagement Section above) with the employer and training provider (if applicable) to agree roles and responsibilities.

On Programme

It is the responsibility of the training provider to create and deliver the apprentice training programme, ensuring you comply with the relevant ESFA rules. The EUIAS has no formal involvement in the 'on-programme' aspect of the apprenticeship. However, we DO provide guidance on how to put together the portfolio that is required for the Interview which is underpinned by portfolio of evidence. This can be found in Section 5.

We do appreciate that circumstances change so please notify us if:

- expected end-dates change, giving at least three months' notice of readiness for end-point assessment
- any cohort details change, especially if an apprentice drops off the programme
- any anticipated changes in venues for the end-point assessments.

Scheduling the end-point assessment

The EPA for GNO is very resource intensive, both in terms of availability of specialist settings for the practical assessment with questioning and in terms of availability of the specialist assessors that are required. The apprentices must be available for all assessments. Employer, training provider and EUIAS must keep in touch and notify each other of any changes as soon as they occur.

To help things run smoothly, you must inform EUIAS between 3 and 6 months before you expect to have your Gateway meetings with the cohort. The EUIAS Service Delivery team will be contacting you during this time, to facilitate two-way communication. Your proposed EPA date may be sooner than was originally anticipated at the time of registration, which is OK so long as the apprentice(s) has been on programme for at least a year.

We cannot confirm any EPA arrangements until we have confirmation of Gateway Eligibility Report, as discussed in the next section, but we will put together a provisional plan and share it with you. As a customer, you probably want to confirm Gateway Eligibility Report on one day and have the first end-point assessments the next day. The reality is that scheduling takes time and can take varying periods of time. The early notification helps us put together a provisional schedule, but we can only confirm it after Gateway Eligibility Report requirements are all met. The fewer changes you make to the information you give us three months before Gateway, the sooner it will be before we can start the EPA. We too commit to making last-minute changes as rare as possible.

We always aim to accommodate your requirements when scheduling, taking account of availability of apprentices, location and availability of assessment venues, availability of assessors and also ensuring that we have evidence of the pre-requisites, in particular the apprentice:

- has achieved Level 1 English and Mathematics
- has compiled and submitted a portfolio of evidence to EUIAS **1 month** prior to the interview as the portfolio will underpin the interview
- has achieved Network Construction Operations (Gas) Level 1 qualification, as a minimum
- with 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 their primary language

As soon as possible after Gateway, EUIAS will confirm with you the end-point assessment arrangements for each apprentice in the cohort.

We will always try to schedule as soon as possible within the 6-month window, to allow time for any re-sits before the window closes.

How to prepare for gateway

On completion of their on-programme learning apprentices should be ready to pass through ‘gateway’ to their end-point assessment.

At this point, the employer, training provider and apprentice should hold a Gateway Eligibility meeting. The purpose of this meeting is to confirm that all parties agree the apprentice has met the requirements of the apprenticeship standard and is ready for end-point assessment. Note that the EUIAS is NOT present at this meeting. It is your sole responsibility to assure yourself, along with the training provider (if applicable) that the

apprentice is ready for end-point assessment.

You are advised that the apprentice should prepare for this meeting by bringing along work-based evidence, including:

- mid and end-of-year performance reviews
- feedback to show how they have met the apprenticeship standards while on-programme.

Before the meeting, apprentices **must** have:

- achieved Level 1 English,
- achieved Level 1 Mathematics
- has achieved Network Construction Operations (Gas) Level 1 qualification, as a minimum
- for those with 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 their primary language
- compiled a portfolio to submit to EUIAS, which will underpin the interview

The portfolio **must** contain the following information:

- evidence related to the KSBs that will be assessed by the interview
- typically, ten discrete pieces of evidence
- evidence must be mapped against the KSBs
- evidence may be used to demonstrate more than one KSB; a qualitative as opposed to quantitative approach is required
- evidence sources may include:
  - workplace documentation and records, for example job task sheets, job cards, time sheets, equipment maintenance and service records
  - witness statements
  - annotated photographs
  - video clips (maximum duration in total 10-minutes)

The above is not a definitive list; other evidence sources are allowable.

- The portfolio evidence should **not** include any methods of self-assessment
- All employer contributions should focus only on direct observation of evidence (for example witness statements) rather than opinions
- All evidence provided must be valid and attributable to the apprentice
- A statement from the employer must confirm that the portfolio of evidence submitted to EUIAS at the gateway point

The portfolio is **not** assessed, it informs the questioning for the interview and allows the apprentice to refer to it to demonstrate competence.

Apprentices should be advised by employers and providers to gather this evidence throughout their on-programme training, **copies or scans of certificates WILL be required by EUIAS** before the apprentice can start EPA. Typically, the English and Mathematics qualifications will be functional skills qualifications at Level 1 or GSCE grade E-D or 2-3 or above.

It is recommended that employers and providers complete regular checks and reviews of this evidence to ensure the apprentice is progressing and achieving the standards before the gateway meeting is arranged.

The Gateway meeting

To comply with end-point assessment rules, EUIAS is not present at the Gateway meeting. Ideally it would be conducted with the apprentice, training provider and the employer present. Gateway meetings last about an hour and are completed on or after the apprenticeship on-programme end date.

During the meeting, the apprentice, employer, and training provider will discuss the different aspects of the apprenticeship standard and confirm that the apprentice has met the full criteria of the apprenticeship standard during their on-programme training. A copy of standard and the assessment plan (ST0204/AP03) should be available at the meeting. In addition, the apprentice should be informed that EUIAS will be conducting the end-point assessment and that copies of the following policies are available on the EUIAS web site at euias.co.uk

- Appeals Policy
- Complaints Policy

At the meeting, the apprentice should be informed that they are required to have proof of their identity with them for each end-point assessment element. EUIAS will accept the following as proof of identity:

- a valid passport
- a UK driving licence
- a valid warrant card issued by HM forces or uniformed services
- other photographic ID card such as an employee ID card or travel card

At the meeting, the Gateway Eligibility Report (GER) below must be completed, agreed and signed by all 3 parties* and submitted to EUIAS at enquiries@euias.co.uk with the subject line "GER – apprentice name – provider name".

A completed GER form is required for every apprentice entered for end-point assessment.

*Where possible. We recognise that some meetings will take place at distance in which case an email agreement from the apprentice should be appended to the GER form.

The current GNO assessment plan (ST0204/AP03) prescribes the Gateway meeting. The Gateway Eligibility Report is a requirement of EUIAS. If it is not possible to have the employer present at the time the Gateway Eligibility Form is completed by the apprentice and training provider, EUIAS will contact the employer to gain their signature.

Reasonable adjustments

If you wish to apply for reasonable adjustments on behalf of any of your apprentices, please do so at the same time as submitting the GER form, using the EUIAS Reasonable Adjustment Policy and Application that can be found at euias.co.uk

Re-sits and Re-takes

Any component that is failed can be re-sat within the EPA window. It is not possible to re-sit outside of the EPA window. If an apprentice is not successful, they can undertake a period of further training and re-take the failed components within a new EPA assessment window.

Timeline

Typical timeline in months, before and after the Gateway.

Initial engagement – typically 24 - 30 months before Gateway

Initial engagement, informal meeting between EUIAS and to agree:

- The numbers of apprentices in the cohort
- Any Reasonable Adjustments you want to apply for
- Expected location(s) for the multiple choice test, practical assessment with questioning and interview underpinned by portfolio of evidence
- The expected date(s) of EPA
- The Training Provider
- The payment schedule
- Completion of Service Level Agreement

Registration - 24-30 months before Gateway to 6 months before Gateway

The apprentice is on-programme and compiling their portfolio of evidence to support the interview.

Formal Appointment/registration using the Cohort Registration form (Triggers Stage 1 payment) EUIAS:

- EUIAS will issue the Privacy Notice which must be shared with every apprentice in the cohort

Employer and training provider:

- Confirmation of expected EPA dates
- Confirmation of the level of service agreed with EUIAS, with pricing
- Confirmation that you will give three months' notice of apprentices being ready for EPA
- Completion of the Learner Submission form including each learner in the cohort
- A purchase order from the lead provider to EUIAS to the value agreed

24 months before Gateway to 6 months before Gateway

Update calls (as agreed)

- EUIAS will periodically call designated contact to enquire about progress towards EPA
- EUIAS provides on-going support via enquiries@euias.co.uk
- Lead provider will give at least 6 months' notice of any proposed change to EPA dates

6 months before Gateway to Gateway

- Lead provider provides details of practical assessment to EUIAS i.e. venue, type of plant/equipment

3 months before Gateway to Gateway

- Employer or training provider to compile evidence of meeting eligibility requirements (Level 1 English and Mathematics, achieved or taken the tests for Network Construction Operations (Gas) level 1 qualification; for those with 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 their primary language; and compiled a portfolio to submit to EUIAS, which will underpin the interview

- Lead provider should be arranging the multiple choice test, practice assessment with questioning and interview underpinned by portfolio of evidence for the apprentices

Gateway

Employer and training provider:

- Provide completed Gateway Eligibility Report for each apprentice
- Ensure ALL eligibility requirements are met for each apprentice going forward to EPA
- Purchase order for Stage 2 payments

Gateway, and the 3-month EPA window

End-point Assessment window (Nb. 3-month window for each apprentice commences on the date of their first EPA activity)

The multiple choice test and the practical assessment with questioning can be undertaken in any order, but we strongly recommend the multiple choice test is carried out first. Our pricing is based on being able to test every apprentice in the cohort at the same time (multiple choice test). **The interview underpinned by portfolio of evidence must be the final assessment component.**

EUIAS:

- Schedule the assessments, in discussion with the employer/training provider
- Provides assessors for all assessment activities (unless otherwise agreed)
- Provides invigilator for multiple choice test (if agreed in the price)
- Arranges re-sits within the 3-month EPA window, if required
- Carries out a final moderation to confirm grading decisions
- Will provide results of EPA with 11 days of final moderation

Employer or training provider:

- Ensures apprentices are briefed and prepared for EPA, including location and timings of assessments
- Ensures apprentices are preparing for the interview by collating evidence for their portfolio
- Provides venue for the (and re-sits if required)
- Provides access and details of venue for the practical assessment with questioning, as previously agreed with EUIAS

NB. A re-take will be arranged, with the agreement of all parties, for apprentices who have failed an element or elements and are deemed to require further training before being ready for end-point assessment.

Level 2 End-Point Assessment for Gas Network Operative

EPA Specification Section 4 – The GNO Standard with Amplification and Guidance

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

The Gas Network Operative Standard in detail

The Gas Network Operative consists of:

- Core Knowledge (18 elements)
- Core Skills (28 elements)
- Core Behaviours (8 elements)

The following pages list each of the elements of the standard and additional amplification and guidance from EUIAS on the range and depth expected.

Core Knowledge
Assessed in the Multiple Choice Test
K1 Utility industry structure and regulatory requirements, including the Gas Act and regulatory surveys
K2.ii Health and Safety at Work Act, New Roads and Street Works Act, working at heights, Provision and Use of Work Equipment Regulations (PUWER), Control of Substances Hazardous to Health (COSHH), Lifting Operations Lifting Equipment Regulations (LOLER), first aid, fire safety, asbestos awareness
K3 Environmental regulatory requirements: Environment Protection Act, disposal of waste and recycling
K6 Principles of traffic management and control
K9 Procedures for gas network emergencies

K10 Electrical safety, including equipotential bonding

K11 Emergency services and statutory authorities – local authorities, highway authorities and Environment Agency; who they are, what they do; escalation procedures

K14 Equality & diversity considerations in the workplace

K15 Data – purpose and protection, for example asset records

Assessed in Multiple Choice Test: Amplification and Guidance

Guidance:

The multiple-choice test will cover the core knowledge that is needed to be a competent gas network operative. Teaching of the core knowledge is essential for gas network operatives to be well informed about principles underpinning good operational practice.

Questions will have four options given and one correct answer. Questions will test either direct knowledge or the application of knowledge.

Questions for the test paper will cover the criteria listed for the knowledge assessment. Other knowledge required by a gas network operative will be assessed through the practical skills assessment and interview.

K1 Utility industry structure and regulatory requirements, including the Gas Act and regulatory surveys

- The difference between gas transmission and gas distribution networks
- The role of Gas Distribution Networks (GDNs)

Assessed in Multiple Choice Test: Amplification and Guidance
• The role of Independent Gas Transporters (IGTs) • The role of gas transporters, shippers, suppliers • The role of primary organisations within the Gas Industry (including the Office of Gas and Electricity Markets (Ofgem), Gas Safe, the Institution of Gas Engineers and Managers (IGEM)) • The difference between legislation, regulations, codes of practice • Broad topic areas covered by the Gas Act • Broad topics areas covered by gas legislation and regulations (including the Gas Safety Management Regulations, Gas Safety (Installation & Use) Regulations, Pressure Systems Safety Regulations, Pipelines Safety Regulations) • Provision and installation of an emergency control valve (ECV) • Potential consequence of not complying with legislation or regulations
K2.ii Health and Safety at Work Act, New Roads and Street Works Act, working at heights, Provision and Use of Work Equipment Regulations (PUWER), Control of Substances Hazardous to Health (COSHH), Lifting Operations Lifting Equipment Regulations (LOLER), first aid, fire safety, asbestos awareness • Health and Safety at work Act • New Road and Street Works Act • Working at Height Regulations, risks and safe working practices • Provision and Use of Work Equipment Regulations (PUWER), risks and safe working practices • Control of Substances Hazardous to Health (COSHH) Regulations, risks and safe working practices • Lifting Operations and Lifting Equipment Regulations, risks and safe working practices

Assessed in Multiple Choice Test: Amplification and Guidance
• Noise at Work Regulations, risks and safe working practices • Risk of dust and safe working practices • Risks and safe working practices associated with Manual Handling • Basic emergency first aid principles and practice, including the use of first aid kits • Principles of fire safety, the fire triangle, fire extinguishers and their use, fires on the gas network, risks and safe working practices • Principles of the Control of Asbestos at Work Regulations, risks and safe working practices • Hazards and risks associated with working on the gas network, principles of risk assessment, control and mitigation measures • Correct use of personal protection equipment (PPE) • Safety warning signs and their meaning • Potential consequence of not complying with legislation or regulations
K3 Environmental regulatory requirements: Environment Protection Act, disposal of waste and recycling • Broad topic areas covered by the Environmental Protection Act • Types of pollution on land, water, air • Potential consequences of pollution • Operational practices required to protect the environment • Principles of waste disposal, minimising waste, types of waste, segregation of waste, recycling

Assessed in Multiple Choice Test: Amplification and Guidance
• Potential consequence of not complying with legislation or regulation
K6 Principles of traffic management and control • Safe practices for working on the highway • Requirements of the “Red Book” (Safety at Street Works and Road Works - A Code of Practice)
K9 Procedures for gas network emergencies • Priority of actions on gas escapes • Advice for customers on gas escapes • Controlled and Uncontrolled gas escapes • Requirements for Internal and External gas escapes • Standards to be met for public reported gas escapes • Explosive range for natural gas • Principles of dealing with liquid petroleum gas (LPG) • Principles of dealing with reports of poor pressure • Interpretation of gas readings, lower exposure limit (LEL), Gas in Air (GIA), relationship between LEL and GIA readings • Risks posed by escaping gas and safe working practices • Use of gas detection equipment, principles of use • Practices for undertaking site surveys on the highway, in private land, inside properties • Evacuation and reoccupation criteria • Fires on the gas network

Assessed in Multiple Choice Test: Amplification and Guidance
• Use of breathing apparatus, requirements for use • Use of personal atmosphere monitors, principles of use • Practices for dealing with gas in ducts
K10 Electrical safety, including equipotential bonding • Hazards and risks posed by electricity • Safe working practices for dealing with safe digging practices and cables exposed in the highway • Use of electrical safety equipment, including volt stick, cat and genny, continuity bonds, insulation joints • Safe working practices for cutting metallic and polyethylene (PE) pipework to minimise the risk of sparks • Principles and practices of equipotential bonding
K11 Emergency services and statutory authorities – local authorities, highway authorities and Environment Agency; who they are, what they do; escalation procedures • Highways authorities • Local authorities • Environment Agency, potential sanctions • Health & Safety Executive, potential sanctions • Emergency services (Fire, Ambulance, Police) and interactions on gas emergencies
K14 Equality & diversity considerations in the workplace

Assessed in Multiple Choice Test: Amplification and Guidance
• Meaning of equality, diversity
K15 Data – purpose and protection, for example asset records

Core Knowledge
Assessed in Practical Assessment with questioning
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
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
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
K8 Procedures for the construction, testing, purging, repair commissioning and decommissioning of gas network assets

K12 Communication techniques – written, verbal; customer service techniques

Assessed in Practical Assessment with Questioning: Amplification and Guidance

Guidance:

As well as giving the apprentice the opportunity to demonstrate practical operational skills, the practical assessment will cover the core knowledge that is needed to be a competent gas network operative. The teaching of the core knowledge is essential for the foundation of knowledge for all Gas Network Operatives.

The apprentice will be required to demonstrate underpinning knowledge and understanding through the practical skills assessment, during which operational procedures will be correctly applied to produce work of the required standard. Additional questioning is intended to supplement the practical skills assessment, either to address gaps in knowledge demonstrated or to provide supplementary evidence of knowledge.

Knowledge questions must be limited to the criteria listed for the practical skills assessment. Other knowledge required by a gas network operative will be assessed through the multiple choice test question paper and through the interview.

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, limitations, know not to modify

• Risks and safe working practices for associated with manual handling, ways of minimising risk
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 and tools, pneumatic gun, hand, and 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 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

Core Knowledge

Assessed in the Interview underpinned by portfolio of evidence

K5. ii Maintenance and storage 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

K7 Excavation techniques, for example, open cut, moling, vacuum extraction. Trench support for example, proprietary systems, sheeting and mechanical
K13 Reporting channels; limits of authority
K16 Information technology, for example to support an accurate audit trail using electronic equipment including handheld and mobile devices
Assessed in the Interview underpinned by portfolio of evidence: Amplification and Guidance
Guidance: The interview provides the apprentice the opportunity to demonstrate knowledge and understanding which will complement that demonstrated during the multiple choice test and practical skills assessment. The interview will cover the core knowledge that is needed to be a competent gas network operative, addressing topics that are not likely to have been adequately covered through other means due to practical assessment being undertaken in a simulated environment. The teaching of the core knowledge is essential for the foundation of knowledge for all gas network operatives. The apprentice will be required to demonstrate underpinning knowledge and understanding through the interview process.

Interview questions must be limited to the criteria listed for the interview. Other knowledge required by a gas network operative will be assessed through the multiple choice test question paper and through the practical skills assessment.
K5.ii Maintenance and storage 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 • Requirements for equipment to be effectively maintained, importance of calibration • Ways to store tools and equipment safely, and promoting care • Hazards and risks associated with tools and equipment that is not properly maintained or calibrated • Requirement for effective records of tools and equipment
K7 Excavation techniques, for example, open cut, moling, vacuum extraction. Trench support for example, proprietary systems, sheeting and mechanical • Appropriate use of different excavation techniques (e.g. open cut, moiling, vacuum excavation), benefits and downsides • Operational application of different excavation techniques, hazards, and risks • Risks of excavating different soil types and at increasing depths • Requirements and procedures for the installation and removal of trench support systems, hazards, and risks
K13 Reporting channels; limits of authority

- Management and reporting structure, supervision
- How to report accident, incidents, near misses
- Limits of authority

K16 Information technology, for example to support an accurate audit trail using electronic equipment including handheld and mobile devices

- How to receive job or work instructions for service laying, main laying or gas escapes using IT systems
- How to provide or update job or work records for service laying, main laying or gas escapes using IT systems
- Types of date to be received and reported and their importance
- The importance of accurate site and job records
- Protecting the security of information
- Situations where the use of IT systems and communications methods may not be appropriate
- Awareness of Business Continuity Management (BCM) processes to use if IT systems fail

Core Skills
Assessed in Practical Assessment with Questioning: Amplification and Guidance
S1 Identify hazards and implement controls to reduce risks
S2 Interpret work instructions, engineering instructions and determine actions
S3 Identify and organise resources to undertake activities
S4 Comply with workplace health, safety & environmental policy, and practice, including use of Personal Protective Equipment (PPE) and safety equipment
S5 Set out signing, lighting, and guarding
S6 Excavate holes for gas utility network services
S7 Monitor and maintain site conditions, including good housekeeping
S8 Identify, locate, and avoid utility supply apparatus and sub-structures
S9.i Check and operate equipment and tools; report faults if required

Core Skills
Assessed in Practical Assessment with Questioning: Amplification and Guidance
S10 Communicate with colleagues and or stakeholders, for example, statutory agencies and members of the public, customers
S11 Use breathing apparatus
S15 Construct new and replacement gas services to internal and external service termination positions using a range of techniques
S16 Carry out squeeze off activities on gas services (low and medium pressure)
S17 Construct new and replacement gas mains using a range of techniques
S18 Carry out flow stopping on gas mains by use of squeeze off and bag stop
S19 Disconnect gas meters
S20 Repair gas assets including valves and fittings using a range of techniques
S21 Join materials by electro-fusion

Core Skills
Assessed in Practical Assessment with Questioning: Amplification and Guidance
S22 Join materials by butt fusion processes
S23 Exchange emergency control valve
S24 Test gas network assets at low and medium pressure
S25 Purge, commission and decommission gas network assets
S26 Apply gas network emergency procedures, including the analysis of gas readings
S27 Apply water extraction techniques for gas mains and services
Core Skills
Assessed in the Interview Underpinned by Portfolio of Evidence
S9.ii Maintain and store equipment and tools

Core Skills
Assessed in Practical Assessment with Questioning: Amplification and Guidance
S12 Use gas detection equipment
S13 Carry out trench installation for example, sheeting, lightweight and proprietary systems
S14 Record information, for example job reports, time sheets

Core Skills
Assessed in Interview Underpinned by Portfolio of Evidence: Amplification and Guidance
Guidance: The practical assessment will cover the core skills that are needed to be a competent gas network operative. The teaching and application of the core skills is essential for the foundation of skills needed for all gas network operatives.

The practical assessment will require the application of knowledge and the demonstration of practical skills in a safe and logical manner and in accordance with relevant procedures. Assessments will cover each the topic areas of Service laying, Main laying and Emergency & Repair. Assessments will be undertaken in simulated environments (e.g. a workshop) rather than on site, with activities being as realistic as possible.
S1 Identify hazards and implement controls to reduce risks • Undertake a risk assessment of the task and implement control measures
S2 Interpret work instructions, engineering instructions and determine actions • Identify applicable work instructions and engineering instructions • Identify the applicable procedures to follow • Decide how to carry out the practical task
S3 Identify and organise resources to undertake activities • Identify and obtain the tools and equipment required for the task • Identify and obtain the materials required for the task • Prepare tools, equipment and materials for use

S4 Comply with workplace health, safety & environmental policy, and practice, including use of Personal Protective Equipment (PPE) and safety equipment • Wear PPE appropriate for the task • Demonstrate the correct use of PPE • Apply safe working practices, including the safety of self and others • Demonstrate care for the environment • Demonstrate the correct use of safety equipment, including volt stick, breathing apparatus, personal atmosphere monitor
S5 Set out signing, lighting, and guarding • Set out signing, lighting, and guarding appropriate for the task in accordance with the Red Book
S6 Excavate holes for gas utility network services • Select appropriate tooling • Use safe excavating practices • Appropriately segregate excavated material • Appropriately store and protect excavated material

S7 Monitor and maintain site conditions, including good housekeeping • Organise and maintain the site in a safe and tidy manner • Put away tools and equipment when not in use • Collect and safely dispose of any waste produced
S8 Identify, locate, and avoid utility supply apparatus and sub-structures • Demonstrate the use and understanding of utility plans • Undertake a comprehensive site survey with plant location equipment • Mark any indications traced
S9.i Check and operate equipment and tools; report faults if required • Undertake appropriate pre-use checks on tools and equipment to ensure fitness for purpose • Identify any faulty equipment • Apply appropriate procedures for the reporting of faulty equipment • Correctly use items of tools and equipment, demonstrating safe working practices

S10 Communicate with colleagues and or stakeholders, for example, statutory agencies and members of the public, customers • Communicate effectively with others, as required by the task • Demonstrate polite and courteous interaction with others whilst being clear and concise about the message given. • Confirm the understanding of others about any message given. • Demonstrate good customer service
S11 Use breathing apparatus • Correctly prepare breathing apparatus prior ready for use • Correctly apply and test breathing apparatus • Demonstrate the use of breathing apparatus whilst undertaking a task • Remove breathing apparatus after use, clean and store
S15 Construct new and replacement gas services to internal and external service termination positions using a range of techniques • Check PE pipe for damage prior to use • Demonstrate the correct installation of new and replacement service pipework through a range of techniques (eg open cut, dead insertion, live insertion, moling)

• Demonstrate the drilling and tapping of a metallic main • Demonstrate the connection of a service to a metallic main • Demonstrate the fusion of a top tee to a PE main through the correct use of equipment • Demonstrate the connection of a service to a PE main through the correct use of equipment • Ensure that electrofusion joints have been successful • Demonstrate the connection of service pipework to internal and external meter positions • Demonstrate the correct termination of a service through the installation and labelling of the ECV
S16 Carry out squeeze off activities on gas services (low and medium pressure) • Demonstrate the squeeze-off of a low pressure service • Demonstrate the squeeze-off of a medium pressure service
S17 Construct new and replacement gas mains using a range of techniques • Check PE pipe for damage prior to use • Demonstrate the correct installation of new and replacement mains pipework through a range of techniques (eg open cut, dead insertion, live insertion)

• Undertake a branch connection of a PE main to another PE main • Undertake a branch connection of a PE main to a metallic main • Connect a PE main to a metallic flange
S18 Carry out flow stopping on gas mains by use of squeeze off and bag stop • Correctly apply squeeze-off equipment on a low pressure PE main, with bypass and pressure points • Undertake a flowstopping operation using squeeze-off, applying correct sequences and in accordance with procedures • Correctly remove squeeze-off equipment • Undertake appropriate checks of bagstop equipment • Correctly install bagstop equipment on a low pressure metallic main, with bypass and pressure points • Undertake a flowstopping operation using bagstop, applying correct sequences and in accordance with procedures • Correctly remove bagstop equipment and plug holes in main
S19 Disconnect gas meters • Correctly apply procedures for the disconnection of a meter, applying safe working practices • Demonstrate care for the removed meter

S20 Repair gas assets including valves and fittings using a range of techniques

- Apply safe working practices when working with escaping gas
- Apply a temporary repair to a leaking gas service
- Replace a section of damaged PE service pipe
- Undertake the repair of a leaking lead yarn joint on allow pressure main
- Undertake the repair of a bolted or flanged joint on a metallic main
- Apply a repair clamp to a metallic main
- Apply a temporary repair to a fitting on a metallic main
- Remove and replace a leaking metallic fitting on a main
- Demonstrate understanding of how a leaking valve may be repaired

S21 Join materials by electro-fusion

- Prepare pipes for jointing by electrofusion
- Demonstrate mains jointing by electrofusion using appropriate equipment
- Ensure that electrofusion joints have been successful

S22 Join materials by butt fusion processes • Prepare pipes for jointing by butt fusion • Demonstrate mains jointing by butt fusion using appropriate equipment • Carry out checks to ensure the quality of butt fused joints
S23 Exchange emergency control valve • Correctly apply procedures for the exchange of an emergency control valve, applying safe working practices
S24 Test gas network assets at low and medium pressure • Demonstrate safe working practices when applying pressure tests • Correctly apply a pressure test to a new low pressure service and make appropriate records • Correctly apply a pressure test to a new medium pressure service and make appropriate records • Correctly apply a pressure test to a new low pressure main and make appropriate records • Correctly apply a pressure test to a new medium pressure main and make appropriate records
S25 Purge, commission and decommission gas network assets

• Demonstrate procedures to purge a service to gas • Demonstrate procedures to directly purge a main to gas • Demonstrate procedures to decommission a service, purging from air to gas • Demonstrate procedures to decommission a main, directly purging from air to gas
S26 Apply gas network emergency procedures, including the analysis of gas readings • Apply procedures following a public reported gas escape • Prioritise actions on site • Undertake a site survey in accordance with procedures to identify the source of an escape. • Undertake checks inside and outside of properties • Apply evacuation criteria as appropriate • Make appropriate records of the site search inside and outside of properties
S27 Apply water extraction techniques for gas mains and services • Demonstrate correct use of equipment to extract water from a service • Demonstrate correct use of equipment to extract water from a main

• Check gas supplies to adjacent properties • Demonstrate correct disposal of water extracted

Core Behaviours
Assessed in Practical Assessment with Questioning
B1 Prioritises health, safety and environment when undertaking work to safeguard life and property
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
B5 Self-motivated, for example manages own time effectively, takes responsibility to complete the job
B6 Pride in work, for example works to agreed quality targets and standards

Assessed in Interview Underpinned by Portfolio of Evidence
B2 Adaptable, for example willing to accept changing priorities and working requirements
B3 Team player, for example keeps others informed, recognises personal and professional limitations, and seeks advice when necessary
B7 Customer focus, for example keeps customers informed
B8 Committed to continued professional development

Core Behaviours

Assessed in Practical Assessment with Questioning: Amplification and Guidance
B1 Prioritises health, safety and environment when undertaking work to safeguard life and property • Demonstrates the application of knowledge to promote safety, health and care for the environment • Demonstrates the need to safeguard life and property when undertaking operations, particularly when attending gas escapes

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 • Demonstrate professionalism when undertaking operations and when representing the Company • Demonstrate understanding of the need to be punctual, trustworthy, polite, courteous, presentable • Demonstrate understanding of the need to maintain the security of business specific and personal data • Demonstrate understanding of equality and diversity in interactions with others
B5 Self-motivated, for example manages own time effectively, takes responsibility to complete the job • Demonstrate self-motivation when undertaking work • Demonstrate the effective use of own time • Take responsibility for work undertaken on site
B6 Pride in work, for example works to agreed quality targets and standards • Demonstrate pride in own work • Demonstrate understanding of the need to work to quality standards

- Demonstrate understanding of the need to work to agreed targets

Core Behaviours

Assessed in Interview Underpinned by the Portfolio: Amplification and Guidance

B2 Adaptable, for example willing to accept changing priorities and working requirements • Recognise when changing conditions can impact on site operations
B3 Team player, for example keeps others informed, recognises personal and professional limitations, and seeks advice when necessary • Recognise the benefits of teamwork • Recognise and acknowledge personal limitations and limits of authority • Recognise the need to seek advice from others when necessary
B7 Customer focus, for example keeps customers informed • Demonstrate effective interaction with customers, recognising customers' needs • Agree with customers the work to be undertaken and then carry out work as agreed • Recognise the need to keep customers informed of progress
B8 Committed to continued professional development • Demonstrate the need for continued professional development to remain competent in the job role

- Recognise ways in which continued professional development can be achieved

Level 2 End-Point Assessment for Gas Network Operative

EPA Specification Section 5 – Assessment

- Assessment summary
- Retake and resit information
- Overall grading
    - 5.1 Multiple Choice Test
    - 5.2 Practical Assessment with questioning
    - 5.3 The Interview underpinned by portfolio of evidence

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

Assessment Summary

The end-point assessment for Gas Network Craftsperson (GNO) consists of three components:

Multiple Choice Test

- The test ensures that the apprentice has acquired the underpinning knowledge to enable them to perform their role. The test consists of 40 multiple choice questions to be answered in a 75-minute assessment under controlled conditions. Each question will present the apprentice with 4 options from which they must select the correct one

Practical Assessment with questioning

- This is a skills-based practical exercise which will take 11 – 12 hours. The exact duration will be similar to the time expected for a competent Gas Network Operative to complete a similar task. The task will be a set task or a series of set tasks. The practical task will take place in either the workplace or a simulated environment that reflects the real working environment appropriate to the task(s). The practical task will be set and agreed by EUIAS, taking account of workplace considerations via discussions and meetings with the apprentice's employer. During the test the Independent Assessor can question the apprentice to ascertain the depth and breadth of their underpinning knowledge

Interview underpinned by portfolio of evidence

- This is a face-to-face professional interview underpinned by portfolio of evidence which takes place after successful completion of the multiple choice test and practical assessment with questioning
- The apprentice can refer to and illustrate their answers with evidence from their portfolio, however the portfolio evidence will not be directly assessed
- The apprentices will be expected to understand and use relevant occupational language that would be typical of a competent gas network operative
- The portfolio must be submitted within three-weeks of the practical assessment completion
- The Independent Assessor will ask a minimum of nine open questions and follow up with additional questions to seek clarification
- The interview must last 45 minutes. The independent assessor has the discretion to increase the time of the interview by up to 10%, to allow the apprentice to complete their last answer
- The independent assessor will holistically assess the interview underpinned by the portfolio using the grading criteria for this assessment. A report will be completed which will include all grading decisions made by the independent assessor. The report must be submitted to EUIAS within 3 days of the interview

Roles and responsibilities

EUIAS will provide independent assessors.

EUIAS can provide the invigilator, or the employer can provide the invigilator in accordance with EUIAS Invigilation guidelines. This will be agreed at the Registration stage (see Section 3).

The employer or training provider will provide the venues for all assessments, including settings for the practical assessment with questioning which must be suitably equipped to allow the apprentice to attempt all aspects of the practical assessment with questioning. The employer or training provider will provide all necessary tools and equipment for the apprentice.

The employer or training provider will adequately prepare apprentices for the end-point assessments and will ensure the practical assessment evidence for each apprentice is submitted to EUIAS prior to end-point assessment at an agreed date.

Retake and resit information

Elements 1 and 2 below can be delivered in any order, however EUIAS recommend beginning with the multiple choice test. Element 3 **must** always be delivered last:

- Element 1: Multiple Choice Test
- Element 2: Practical Assessment with questioning
- Element 3: Interview underpinned by portfolio

Apprentices who fail one or more assessment method will be offered the opportunity to take a re-sit or a re-take. A re-sit does not require further learning, whereas a re-take does.

Apprentices should have a supportive action plan to prepare for the re-sit or a re-take. The apprentice's employer will need to agree that either a re-sit or re-take is an appropriate course of action.

An apprentice who fails an assessment method, and therefore the EPA in the first instance, will be required to re-sit any failed assessment methods only.

Re-sits and or re-takes must be taken and passed within three-months of the fail notification, otherwise the entire EPA must be re-taken, unless in the opinion of the EUIAS exceptional circumstances apply outside the control of the apprentice or their employer.

There are no restrictions on overall EPA grading where apprentices need to re-sit and/or re-take the multiple-choice test or interview underpinned by portfolio but do not need to re-sit and/or retake the practical assessment with questioning. That means, apprentices can still get an overall distinction if they achieved a distinction in their practical assessment with questioning on first attempt even if they need to re-sit or re-take one of the other assessment methods. Apprentices who need to re-sit and/or re-take the practical assessment with questioning will only be able to achieve a pass for this assessment method and thus will only be able to achieve an overall EPA pass, subject to gaining a pass in the other two assessment methods.

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

If the apprentice fails one element the apprentice **must**, with immediate effect, be withdrawn from the

EPA process. The EUIAS will provide feedback to the employer and or training provider and agree an action plan for the apprentice.

The apprentice will only be expected to retake the GNO EPA element that they have failed. The retake **must only** be carried out after one month has elapsed since the first scheduled date of the EPA element. The apprentice **cannot achieve higher than a pass** for the EPA element that they have had to retake.

Overall Grading

Each assessment method is marked separately and awarded either a fail, pass or distinction.

The multiple choice test grade is based on the percentage score achieved. The grade and mark for both the practical assessment and the interview is based on the number and level of criteria achieved.

Assessment method 1 – Practical assessment with questioning	Assessment method 2 – Interview underpinned by portfolio of evidence	Assessment method 3 – Multiple-choice test	Overall grading
Fail	Any grade	Any grade	Fail
Any grade	Fail	Any grade	Fail
Any grade	Any grade	Fail	Fail
Pass	Pass	Pass	Pass
Distinction	Pass	Pass	Distinction

Any grade = fail, pass or distinction

Level 2 End-Point Assessment for Gas Network Operative

EPA Specification Section 5.1 – Multiple Choice Test

- Criteria
- 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

The multiple choice test consists of 40 questions sampling the knowledge, skills and behaviours as required of the Gas Network Operative Standard (listed below as K1, K2.ii, K3, K6, K9, K10, K11, K14 and K15). The practice test supplied as part of this document illustrates the format and style of the assessment.

Preparing for the Multiple Choice Test

- While on-programme, the employer or training provider should ensure the apprentice is familiar with all areas assessed by the multiple choice test
- The employer or training provider should support the apprentice to complete a practice test and provide them with formative feedback to enable them identify areas of further learning

Multiple Choice Test Criteria

The criteria that are covered in the multiple choice test are listed below. In each assessment, questions will cover each of the areas; not every aspect of every area will be covered in every assessment. Refer to Section 4 for amplification and guidance.

Knowledge, Skills and Behaviours	Number of KT questions
K1 Utility industry structure and regulatory requirements, including the Gas Act and regulatory surveys	1 - 3
K2.ii Health and Safety at Work Act, New Roads and Street Works Act, working at heights, Provision and Use of Work Equipment Regulations (PUWER), Control of Substances Hazardous to Health (COSHH), Lifting Operations Lifting Equipment Regulations (LOLER), first aid, fire safety, asbestos awareness	12 - 16
K3 Environmental regulatory requirements: Environment Protection Act, disposal of waste and recycling	2 - 4
K6 Principles of traffic management and control	5 - 7
K9 Procedures for gas network emergencies	5 - 7

K10 Electrical safety, including equipotential bonding	4 - 6
K11 Emergency services and statutory authorities – local authorities, highway authorities and Environment Agency; who they are, what they do; escalation procedures	1 - 3
K14 Equality & diversity considerations in the workplace	1 - 3
K15 Data – purpose and protection, for example asset records	2 - 4

Multiple Choice Test Grading

This component is graded as follows:

Grade	Marks
Fail	0 - 27
Pass	28 - 40

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
- Grading Criteria

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:

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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

Standard	Indicative Pass Criteria
	• Identify and correctly report any faults with tools and equipment • 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

Standard	Indicative Pass Criteria
S17 Construct new and replacement gas mains using a range of techniques	• Install new or replacement service pipe by open cut, dead insertion 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

Standard	Indicative Pass Criteria
	• Test pipework to ensure repair has been successful
S21 Join materials by electro-fusion	• Correctly join two sections of service pipe using electrofusion, 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

Standard	Indicative Pass Criteria
	• Verify the effective commissioning of a new or replacement section of main
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

Standard	Indicative Pass Criteria
	• Explains the implications of non-compliance with relevant health and safety standard, regulations, and practice • 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

Level 2 End-Point Assessment for Gas Network Operative

EPA Specification Section 5.3 – Interview underpinned by portfolio of evidence

- Introduction
- Preparing the Evidence Portfolio
- Preparing for the Technical Interview
- 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

The Interview is the final stage of the end-point assessment. It is assessed via a discussion with an independent assessor. Representatives from the apprentice's employer or training provider are **not allowed** to be present in the room whilst the Interview is being conducted.

The discussion will focus on each of the elements of the standard listed below. It is important that the apprentice is completely familiar with each of them.

- Core Knowledge (K5. ii, K7, K13 and K16)
- Core Skills (S9. ii, S12, S13 and S14)
- Core Behaviours (B2, B3, B7 and B8)

See Section 4 for the references to the standard.

In advance of the Interview the apprentice will receive information about how the interview will work and the apprentice can refer to and illustrate their answers with evidence from their portfolio of evidence, however the portfolio evidence is not directly assessed.

The interview will last 45 minutes. The independent assessor has the discretion to increase the time of the interview by up to 10%, to allow the apprentice to complete their last answer.

The interview will:

- take place after successful completion of the multiple choice test and practical assessment
- be face to face or remote, as agreed
- be recorded on an interview record
- be recorded with the use of relevant technology
- evidence the above KSBs

The apprentice can achieve a pass or fail. If the apprentice fails, this element the apprentice must with immediate effect be withdrawn from the EPA process. Further information can be found in Section 5 'Retake and Resit Information'.

Portfolio of Evidence

The apprentice must compile a portfolio of evidence during the on-programme period of their apprenticeship. The portfolio **must**:

- contain evidence that has been clearly mapped by the apprentice to demonstrate the knowledge, skills, and behaviours (KSBs) as this evidence will be used by the independent assessor to assess the apprentice during the interview
- contain typically **ten quality** discrete pieces of evidence, mapped to the standard
- have evidence which may be used to demonstrate more than one KSB; a qualitative as opposed to quantitative approach is required
- include the following evidence sources:

- workplace documentation/records, for example job task sheets/job cards/time sheets, equipment
  maintenance/service records
- witness statements
- annotated photographs
- video clips (maximum duration in total 10-minutes)

This **not** a definitive list. The apprentice can include other evidence sources.

- **not** include any methods of self-assessment
- only include employer contributions that focus on **direct observation** of evidence (for example witness statements) rather than opinions
- include evidence that is valid and attributable to the apprentice; the portfolio of evidence must contain a statement from the employer confirming this
- be **submitted to the EUIAS** at the gateway point; the portfolio is **not** assessed; it informs the questioning for the interview and it will allow the apprentice to refer to it to demonstrate competence to the independent assessor
- include evidence of reviews that have been completed and recorded to determine progression towards competence across the entire occupational standard

Grading the Interview

The grading criteria are described in the following pages.

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

Interview Underpinned by Portfolio of Evidence Grading

The interview underpinned by portfolio of evidence is graded by the independent assessor appointed by EUIAS. The following tables explain the criteria that are applied in order to achieve each grade for the Interview.

To achieve a **PASS** for the Interview, a Pass is required in **ALL** relevant criteria:

Knowledge	K5.ii	K7	K13	K16
All Pass criteria must be achieved	✓	✓	✓	✓

Skills	S9.ii	S12	S13	S14
All Pass criteria must be achieved	✓	✓	✓	✓

Behaviours	B2	B3	B7	B8
All Pass criteria must be achieved	✓	✓	✓	✓

Achieving all these elements represents a total score of a pass or fail in the interview underpinned by portfolio of evidence assessment.

Interview underpinned by portfolio Grade	Minimum Criteria Achieved
Pass	All Pass criteria

Note: It is **ONLY** possible to achieve a pass in the interview.

Indicative 'pass' criteria for the Interview Underpinned by Portfolio of Evidence Assessment

The following criteria are indicative of the **Pass** criteria the independent assessor will be looking for when the apprentice carries out the interview underpinned by portfolio of evidence assessment.

Knowledge, Skills and Behaviours	Indicative Pass, apprentice must meet all of the following:
Tools and equipment (O) **K5.ii** **S9.ii**	• Provide an example of how they have correctly completed maintenance checks for equipment/tool, as identified by the independent assessor • Provide two examples of how they have correctly stored equipment/tools, as identified by the independent assessor
Reporting channels **K13**	• Describes their own limits of autonomy, when to escalate tasks and issues and to whom • Provides an example of how and to whom they report the outcome of their work
Information Technology and Reporting **K16** **S14**	• Provides two full, accurate examples of completed work documentation required for a task using IT or handheld devices and explains the data requirements • Outlines the potential consequences of poor communication, in relation to a situation as identified by the independent assessor

Knowledge, Skills and Behaviours	Indicative Pass, apprentice must meet all of the following:
Gas detection **S12**	• Provides an example of when and how they correctly used gas detection equipment
Excavation and trench installation **K7** **S13**	• Describes different excavation techniques, for example open cut, moling, vacuum extraction. • Provides at least two examples of when and how they have correctly carried out trench installation using different methods for example, sheeting, lightweight and proprietary systems as directed by the independent assessor
Adaptable and Customer focused **B2** **B7**	• Provide an example of where they have been adaptable and customer focused, due to changing priorities and/or working requirements
Team player **B3**	• Provides an example of being a team player in the workplace, outlining the situation and the role they played
Continued Professional Development) **B8**	• Outlines at least two different types of CPD • Provides a detailed example of CPD activity they have completed

Level 2 End-Point Assessment for Gas Network Operative

EPA Specification Section 6 – Practice Assessments and guidance

- Multiple Choice Test Guidance
- Practice Multiple Choice Test (in Section 7)
- Guidance for setting up a Practice Practical Assessment with Questioning
- Sample brief for a Practical Assessment with Questioning Brief (in section 7)

Contacts

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Help Desk telephone: 0121 713 8310

The Multiple Choice Test

Guidance – preparation for the multiple choice test

While on-programme, the employer and or training provider should brief the apprentice on the areas to be assessed by the multiple choice test, as detailed in Section 5.1. These are the selected knowledge elements of the standard: K1, K2.ii, K3, K6, K9, K10, K11, K14 and K15. It is good practice to identify the areas within the learning programme where the relevant knowledge is delivered and ensuring that apprentices are aware that elements from each of these criteria might come up in the test.

The multiple choice 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 operative role as a whole and are not focussed on specific plant, machinery, or employer-specific processes.

In readiness for end-point assessment, the apprentice should complete a sample test, which is included as an Annex to this specification. This should be undertaken in advance of the multiple choice test, with enough time to mark the assessment, and provide feedback to learners.

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

Practical Assessment with Questioning

Guidance for setting up a Practical Assessment with Questioning

The practical assessment with questioning involves an independent assessor observing and questioning an apprentice undertaking a set task or a series of set tasks in a simulated environment. The simulated environment must closely relate to their natural working environment. A set of task briefs which are of comparable complexity have been developed by EUIAS. The briefs can be adapted to suit more specific requirements of the apprentice's role. One of the briefs must be chosen and adapted within guidelines.

While it is not permitted to brief the apprentice on the actual specification that will be selected for the test during the live practical assessment and questioning, it is permitted to set up specifications of similar complexity and duration and ask the apprentice to carry them out under live assessment conditions. To make the practice more realistic, a tutor or supervisor should adopt the role of assessor and use the appropriate grading criteria from Section 5 to 'assess' the apprentice. An example brief for a practical assessment and questioning is included in Section 7.

3 months before the practical assessment is scheduled for the apprentice the employer must submit the following documentation to the EUIAS for approval:

- Produce the practice task brief which should provide specification instructions for the apprentice to be able to:
    - Undertake health and safety/risk and waste management
    - Check and operate tools and equipment
    - Locate utility network assets
    - Excavate
    - Communicate

- Demonstrate Professionalism
- Construct, repair, commission, decommission of gas network assets / test and purge, gas network assets
- Demonstrate emergency procedures
- plan the job
- select the appropriate tools and materials
- focus on the skill
- work safely

- Photographs and or videos of the real working environment where the practical task(s) will be conducted

For example, the apprentice will be expected and must work to the tolerance and specifications as stated above consistent with a realistic working task. Note that the expectation is that the practical assessment with questioning must be carried out over a total assessment time of 12 hours. 11 hours for completing the practical assessment and therefore must be sufficiently complex to match this duration and 1 hour allocated for questioning.

The live practical assessment also includes questioning from the independent Assessor. The questioning is designed to confirm the apprentice's understanding of the rationale for actions taken and choices made to complete the task. To prepare the apprentice for this aspect of the practice Practical Assessment, we recommend developing some open-ended questions which focus on the rationale for each part of the task.

The tutor or supervisor carrying out the practice assessment should record their assessment of how the apprentice performed and provide feedback to the assessor with guidance on what to do to improve their performance, taking note of the grading descriptors for pass and distinction in Section 5.

Interview underpinned by evidence of portfolio

Preparing for the Interview underpinned by evidence of portfolio

The purpose of the interview underpinned by the portfolio of evidence is to allow the apprentice to demonstrate how they have met their knowledge, skills, and behaviours in order to carry out their occupational role as a gas network operative effectively and safely. The discussion will take place between the apprentice and the independent assessor. The apprentice should draw on evidence in their portfolio during the discussion. The interview is an effective way of assessing complex topics and will allow the apprentice to showcase the depth and breadth of their understanding.

The practice interview should be scheduled before the live end-point assessment and with enough time to provide feedback for the apprentice to learn from. A period of two weeks or more is recommended, depending on the circumstances. The key is that the apprentice has time to act on the feedback they get at the end of the practice session. We would recommend scheduling another practice interview after the apprentice has had time to review and act upon the feedback. There are no limits to the number of practice interviews that should be scheduled.

A period of 45 minutes should be set aside for the practice interview, and a set of open-ended questions prepared to cover each of the areas of the standard covered by the review.

They should record their assessment of the apprentice's performance, using the grading descriptions in Section 5 as a guide, and provide the apprentice with feedback, focussing on areas of improvement.

The Interview questioning should synoptically examine the knowledge, skills, and behaviours by the apprentice through their on-programme experience. The questioning should be contextualised to the apprentice's specific job role. The tutor or supervisor must:

- prepare some interview questions around the work that the apprentice has been doing. This should be based as much as possible on evidence that has been collated in the portfolio. The independent assessor during the live interview will ask a minimum of 9 nine questions along with additional follow up questions to seek clarity if required
- use various questioning techniques to confirm the depth of knowledge and or range of skills
- record the Interview or provide a clear narrative if the interview was not recorded. The narrative must describe the apprentices' responses to the questions. The narrative must capture the depth and breadth of the apprentice's response
- ensure the apprentice has provided evidence in their responses to cover all the relevant elements of the standard
- provide feedback to the apprentice focussing on any areas of the standard missed, or where appropriate, to give guidance on achieving a pass

The apprentice should be prepared to:

- identify and expand on examples of the application of KSBs in completed set tasks in the workplace considering the GNO standard
- demonstrate how they have met the KSBs to carry out the occupational role effectively and safely
- discuss evidence of their work as recorded in the portfolio. The portfolio should have examples of job-related tasks so the independent assessor can determine the role the apprentice had taken on to complete the work and understand if and how they overcame any challenges or barriers that were faced to complete the set tasks
- attend the interview which will be expected to last 45 minutes
- provide background information about their current job role, workplace, responsibilities and discuss their apprenticeship portfolio with the assessor
- are expected to understand and use relevant industry language that would be expected of a competent gas network operative
- refer to and illustrate their answers with evidence from their portfolio of evidence, however the portfolio evidence in not directly assessed
- answer questions that cover the following topics, a minimum of one question per topic:

    - **Tools and equipment (K5. ii and S9. ii)**
    - Provides an example of how they have correctly completed maintenance checks for equipment/tool, as identified by the independent assessor

    - Provides two examples of how they have correctly stored equipment/tools, as identified by the independent assessor

- **Reporting channels (K13):**
  - Describes their own limits of autonomy, when to escalate tasks and issues and to whom
  - Provides an example of how and to whom they report the outcome of their work

- **Information Technology and Reporting (K16 and S14):**
  - Provides two full, accurate examples of completed work documentation required for a task using IT or handheld devices and explains the data requirements
  - Outlines the potential consequences of poor communication, in relation to a situation as identified by the independent assessor

- **Gas detection (S12):**
  - Provides an example of when and how they correctly used gas detection equipment

- **Excavation and trench Installation (K7 and S13):**
  - Describes different excavation techniques, for example open cut, moling, vacuum extraction
  - Provides at least two examples of when and how they have correctly carried out trench installation support using different methods for example, sheeting, lightweight and proprietary systems as directed by the independent assessor

- **Adaptable and Customer focused (B2 and B7):**
  - Provides an example of where they have been adaptable and customer focused, due to changing priorities and/or working requirements

- **Team Player (B3):**
  - Provides an example of being a team player in the workplace, outlining the situation and the role they played

- **Continued Professional Development:**
  - Outlines at least two different types of CPD
  - Provides a detailed example of CPD activity they have completed

Level 2 End-Point Assessment for Gas Network Operative

EPA Specification Section 7 – Supporting documents

- Gateway Eligibility Report
- Practice Multiple Choice test, with Answer Scheme
- Practical Assessment with Guidance
- Practical Assessment Planning Form

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

EUIAS End-point Assessment for Gas Network Operative

Gateway Eligibility Report

(Standard Version: ST0204 version 1.1; Assessment Plan Version: ST0204/AP03)

Apprentice's details

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

Eligibility requirements:

The apprentice must confirm their achievement of the following:

Eligibility requirement	Achieved by the apprentice? Y/N	Evidence (scans of certificates **MUST** be included)
Achieved English Level 1		
Achieved mathematics Level 1		
Achieved Network Construction Operations (Gas) Level 1 as a minimum		

Gateway Eligibility Declaration

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

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

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

Apprentice's name (print):	Signature:	Date:

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

End-point Assessment
Multiple Choice Test Practice Assessment

Please write clearly in block capitals below	
Company name	
First name (s)	
Last name (s)	
Date of birth	
Apprentice number	
Apprentice signature	
Date of knowledge test	

Level: 2
Standard: Gas Network Operative
Duration: 1 hour 15 minutes

Materials

For this paper you must have:

- Pens
- Calculators and reference documents are not required

Instructions

- Use black or blue ink or black ball-point pen
- Fill in the boxes at the top of this page
- Answer **all** questions
- There are questions, possible answers as well as a column for you to mark your answer
- Mark your answer with an ☒ against the possible answer you think is correct- if you wish to change your answer please put a line through ~~☒~~ and re-select with another ☒
- Only one answer per question allowed. Answers which do not follow the rules of selection will be disallowed. This may impact on the grade awarded
- Do all rough work in this answer book, spare paper is provided in this answer booklet and can be used but **MUST NOT** be removed
- Additional spare paper will not be provided
- All questions are closed book

Sample:

London is the capital of….

Example Question		
London is the capital of…		
Possible answers		**Answer**
a)	Wales	~~X~~
b)	Scotland	
c)	Northern Ireland	
d)	England	X

Information

- The marks for questions are 1 mark each
- There are 40 questions in total
- All questions should be attempted

Advice

- You are not allowed to leave the examination room for the duration of the assessment
- Do not spend too long on one question
- Read all questions thoroughly before starting your examination
- Mobile phones and SMART watches must not be taken into the examination room. The examination must be conducted under examination conditions i.e. you may not speak to other candidates, if you have a problem raise your hand and the invigilator will attend
- Cheating: you will be asked to leave the examination room and will be classified an automatic fail and referred to your employer

Do not turn over the page or commence the knowledge test until the invigilator instructs you to

You may use this page to work out on.

This page must not be removed.

Question 1		
Which organisation produces standards for gas service laying and main laying activities?		
Possible answers		**Answer**
a)	The Institution of Gas Engineers and Managers (IGEM)	
b)	Energy & Utility Skills (EU Skills)	
c)	The Health and Safety Executive (HSE)	
d)	Gas Safe	

Question 2		
At what pressure does low pressure mains operate?		
Possible answers		**Answer**
a)	Up to 75 mbar	
b)	At 75 mbar	
c)	Over 75 mbar	
d)	Over 75 mbar when controlled by a regulator	

Question 3		
Which of the following actions is a requirement of the Gas Act 1986?		
Possible answers		**Answer**
a)	Companies transporting gas must be licensed	
b)	Equipment used on the gas network must be regularly maintained	
c)	Gas pressures in a low pressure network must not exceed 75 mbar	
d)	Metallic pipework within the gas supply network must be replaced with polyethylene	

Question 4		
Which ONE of the following statements is correct about safety?		
Possible answers		**Answer**
a)	The only potential harm from electricity is burns	
b)	An individual's behaviour is a major contributory factor	
c)	Hazardous substances are the most common causes of injury	
d)	Personal protective equipment (PPE) will protect individuals from any level of harm	

Question 5		
Which statement correctly reflects the requirements of the Health and Safety at Work Act 1974?		
Possible answers		**Answer**
a)	Employers have duties towards employees and members of the public	
b)	Employers have duties towards employees and their families	
c)	Employees have duties to undertake work to the productivity standards specified by their employer	
d)	Employers have duties to report all incidents and accidents to the Health and Safety Executive	

Question 6		
According to legislation, non-compliance with a health and safety regulation is:		
Possible answers		**Answer**
a)	not an offence	
b)	a civil offence	
c)	a criminal offence	
d)	a disciplinary offence	

Question 7		
The main risk from asbestos comes from:		
Possible answers		**Answer**
a)	breathing in fibres	
b)	fibres on the skin	
c)	fibres in the eyes	
d)	fibres on clothing	

Question 8		
According to the Control of Substances Hazardous to Health (COSHH) Regulations, any work involving substances which are hazardous to health must be:		
Possible answers		**Answer**
a)	assessed and any necessary precautions communicated to the workforce	
b)	monitored and reported to the Health and Safety Executive (HSE)	
c)	undertaken wearing specialist personal protective equipment	
d)	undertaken with a minimum of two people present	

Question 9		
What action must be taken before using any equipment?		
Possible answers		**Answer**
a)	Ensure the equipment is suitable for the job	
b)	Any damaged equipment is reported before it is used	
c)	All necessary guards are available within the tool box	
d)	Check that someone on-site is familiar with the controls	

Question 10		
How often should lifting equipment be inspected?		
Possible answers		**Answer**
a)	Every 6 months	
b)	Every 12 months	
c)	Every 24 months	
d)	Every 36 months	

Question 11		
A fire extinguisher coded with a black colour panel contains:		
Possible answers		**Answer**
a)	foam	
b)	water	
c)	dry powder	
d)	carbon dioxide	

Question 12		
Identify the statement that is applicable to first aid kits?		
Possible answers		**Answer**
a)	The content of a first aid kit should be checked annually	
b)	All the contents of a first aid kits will have expiry dates	
c)	Plasters, dressings, and bandages should be sterile	
d)	The law requires first aid kits to meet British Standard (BS) 8599	

Question 13		
For the purpose of spill control, what is meant by a ‘spill’?		
Possible answers		**Answer**
a)	Any unintentional release of liquid over 1 litre	
b)	Any release of solids, fluids, or gas into the environment	
c)	Any release, deliberate or accidental from a contained source	
d)	The deliberate or unintentional release of fluid on to the ground	

Question 14		
Which statement reflects the ‘precautionary area’ that must be observed when working close to trees?		
Possible answers		**Answer**
a)	The precautionary area only applies to trees with a Tree Preservation Order	
b)	The precautionary area is calculated by drawing a circle around the tree with diameter four times the circumference of the trunk	
c)	The precautionary area is anywhere where tree roots are found underneath the span of the tree canopy	
d)	The precautionary area is a protected area around a tree in which no excavation should take place	

Question 15		
Water pumped from an excavation should be discharged:		
Possible answers		**Answer**
a)	on to any grassed area where available	
b)	into a storm water drain where available	
c)	into a foul sewer where available	
d)	on to a public grass verge where available	

Question 16		
Minimising waste:		
Possible answers		**Answer**
a)	reduces costs and helps to protect the environment	
b)	ensures that materials are always available	
c)	is a legal requirement for setting and achieving targets	
d)	is monitored by The Health and Safety Executive (HSE)	

Question 17		
An example of a hazardous waste is:		
Possible answers		**Answer**
a)	soft plastics	
b)	cured foam-off kits	
c)	spent anaerobic tubes	
d)	part-used anaerobic sealant cartridges	

Question 18		
Which statement applies to the storage of waste in depot yards?		
Possible answers		**Answer**
a)	Waste containers must be labelled	
b)	Waste must be segregated and stored in containers sited on unmade ground	
c)	Waste containers must have built-in drainage to permit rainwater to escape	
d)	Waste bins located in company depots may be used to dispose of domestic waste	

Question 19		
When working in the public highway, high visibility clothing must be worn and:		
Possible answers		**Answer**
a)	can be taken off during periods of hot weather	
b)	may be required when working in a workspace	
c)	may be required when setting out the signs and barriers	
d)	must be correctly fastened, be clean and in a usable condition	

Question 20		
An operative is setting out a site on the highway. What is the first sign to be seen by approaching traffic?		
Possible answers		**Answer**
a)	Road narrows ahead	
b)	Road works ahead	
c)	Traffic control ahead	
d)	A directional arrow	

Question 21		
The angle of the exit taper at the end of the works site should be:		
Possible answers		**Answer**
a)	30º	
b)	45º	
c)	70º	
d)	90º	

Question 22		
The purpose of the safety zone around street works is to:		
Possible answers		**Answer**
a)	separate the work area from vehicular traffic	
b)	separate pedestrians from the work area	
c)	protect the workforce from traffic and to protect traffic from the work	
d)	Protect pedestrians and traffic from the works being undertaken	

Question 23		
The “Red Book” (Safety at Street Works and Road Works) states that the basic safety zone is made up of:		
Possible answers		**Answer**
a)	The area covered by the lead-in taper through to the exit taper	
b)	The work area and the space given for safe passage of pedestrians	
c)	The longways clearance and the sideways clearance	
d)	The lead-in taper, the longways clearance, the sideways clearance, and the exit taper	

Question 24		
What is the typical low alarm level for methane on a personal atmosphere monitor?		
Possible answers		**Answer**
a)	20 ppm (parts per million)	
b)	2% LEL (lower explosive limit)	
c)	20% LEL	
d)	50% LEL	

Question 25		
What is the maximum concentration of gas that is permitted above or below a light switch so that the switch can be used?		
Possible answers		**Answer**
a)	2% gas in air	
b)	20% of the upper explosive limit	
c)	70% of the lower explosive limit	
d)	100% of the lower explosive limit	

Question 26		
For natural gas, a reading of 100% LEL (lower explosive limit) is equivalent to what GIA (gas in air) reading?		
Possible answers		**Answer**
a)	1% GIA	
b)	5% GIA	
c)	10% GIA	
d)	15% GIA	

Question 27		
For the purpose of investigating gas escapes, which ONE of the following are included within the definition of 'ducts'?		
Possible answers		**Answer**
a)	Abandoned underground plant and surface water drainage systems	
b)	Live gas and water mains, foul sewers, and surface water drainage	
c)	Only conduits or channels that contain utility apparatus	
d)	Valve boxes and valve chambers	

Question 28		
What actions must be taken after a property has been evacuated?		
Possible answers		**Answer**
a)	Check gas readings in the property at 15 minute intervals and implement further control measures if the situation becomes worse	
b)	Continually re-assess site conditions and take appropriate action if the situations becomes worse	
c)	Monitor gas readings and allow customers to reoccupy the property when readings fall below 20% LEL	
d)	Regularly re-assess site conditions and relax control measures if gas readings in the property reduce	

Question 29		
Work is being carried out to locate the source of an external gas escape. Under what conditions is it permissible for the site to be left unattended?		
Possible answers		**Answer**
a)	When gas is no longer present within 750 mm of a building	
b)	When gas readings in ducts have fallen to below 70% LEL	
c)	When escaping gas can no longer be seen, heard, or felt	
d)	When arrangements have been made for another team to attend	

Question 30		
When can a team leader release a First Call Operative (FCO) from the site of a gas escape?		
Possible answers		**Answer**
a)	After properties have been evacuated	
b)	When the FCO is needed somewhere else	
c)	When the supply has been turned off at the ECV (Emergency Control Valve)	
d)	When it has been confirmed that properties are not affected by escaping gas	

Question 31		
What must be checked with a Volt Stick?		
Possible answers		**Answer**
a)	Internal pipework	
b)	Metallic mains pipework	
c)	Metallic service pipework	
d)	All exposed metallic surfaces	

Question 32		
When should plant avoidance equipment be used?		
Possible answers		**Answer**
a)	Once the excavation has started	
b)	Before completion of works on site	
c)	Before any excavation work is undertaken	
d)	When there are visible signs of plant in the ground	

Question 33		
On metallic pipework where will equipotential bonding wiring normally be located?		
Possible answers		**Answer**
a)	Under the kitchen sink	
b)	Within 600 mm of pipework entering the property	
c)	On metallic pipework within 300 mm of the gas meter	
d)	Immediately adjacent to the ECV (Emergency Control Valve)	

Question 34		
Select the action that the Health and Safety Executive (HSE) would take if an Inspector finds a company is breaking health and safety laws?		
Possible answers		**Answer**
a)	Fine the company	
b)	Fine the individual and managers	
c)	Issue an improvement notice	
d)	Take disciplinary action	

Question 35		
Who is protected by the discrimination legislation?		
Possible answers		**Answer**
a)	Everyone	
b)	Only adults	
c)	Only females	
d)	Only black and minority ethnic groups	

Question 36		
How many measurements should ideally be recorded to accurately pinpoint mains locations?		
Possible answers		**Answer**
a)	No limit	
b)	1	
c)	2	
d)	3	

Question 37		
When should the depth of cover be recorded for a new main?		
Possible answers		**Answer**
a)	When the main is deep	
b)	When the main is shallow	
c)	When the main has been laid under sewer pipes	
d)	At every point where measurements are taken for the main	

Question 38		
Where should a service information label be attached?		
Possible answers		**Answer**
a)	On the pipework on the inlet side of the ECV (Emergency Control Valve)	
b)	On pipework on the outlet side of the ECV (Emergency Control Valve)	
c)	On the handle of the ECV (Emergency Control Valve)	
d)	Anywhere within 500 mm of the ECV (Emergency Control Valve)	

Question 39		
Identify the statement that reflects the correct requirements for taking records of any pressure test or gas service.		
Possible answers		**Answer**
a)	It is not necessary to record details of failed tests	
b)	Records must be made immediately after a service has been commissioned	
c)	There are different record requirements depending on whether the service is new, diverted, renewed, or transferred	
d)	Records should include the date of the test, and the times at which the test was applied and removed	

Question 40		
Data recorded on-site for asset record purposes must be:		
Possible answers		**Answer**
a)	accurate	
b)	approximate	
c)	calculated	
d)	estimated	

End of Practice Multiple Choice Test Assessment

Practice Multiple Choice Test

Answer scheme

Question	Answer
1	A
2	A
3	C
4	B
5	A
6	C
7	A
8	A
9	A
10	B
11	D
12	C
13	C
14	B
15	D
16	A
17	D
18	A
19	D
20	B

Question	Answer
21	B
22	C
23	D
24	C
25	C
26	B
27	A
28	B
29	C
30	D
31	D
32	C
33	B
34	C
35	A
36	C
37	D
38	A
39	D
40	A

L2 Gas Network Operative

Practical Assessment with Questioning Guidance

The practical assessment of apprentices need to be assessed for each of the elements of the GNO (Gas Network Operative) standard i.e. Service laying, Main laying, Emergency and Repair.

The practical assessment is to be undertaken in a realistic simulated environment, such as a workshop which must closely relate to their natural working environment. The assessments are **not** to be undertaken on site. The location used must be suitable for assessment purposes and be sufficiently confidential so that the apprentice is not influenced by others outside of the designated area.

Assessment scenarios, facilities, equipment, and materials necessary for each task are to be provided by the employer.

Task scenarios must cover the topics specified by EUIAS in the assessment criteria for the GNO standard. Any proposed deviation from this **must** be agreed in advance with EUIAS.

If necessary, it is acceptable for tasks to be divided into its individual component parts for assessment purposes. For example, a service laying job may be separately assessed as mains connection, pipe lay and house entry with service termination, but requirements for testing **must** be included.

Easy access to sufficient necessary equipment and materials is to be provided adjacent to the task location so that the apprentice does not need to waste time or lose concentration searching elsewhere. A sufficient range of tools, equipment and materials must be made available for the apprentice to select which to use. Spare parts should be available in case of foreseeable breakage during the assessment (e.g. spare hacksaw blades).

A total of 12 hours is permitted for all the practical assessments, including one hour for questioning. Consequently 11 hours is permitted for completion of all the 'hands on' practical tasks. Additional time is permitted for supervised comfort breaks, lunch breaks and or movement from one location to the next.

The practical assessment with questioning may be split into discrete sections held over a maximum of two working days; however, the practical assessment should **not** be split either side of a weekend. No individual task may be split over different days, so tasks must be completed on the day in which they are started.

It is the responsibility of the employer to ensure that all the tasks specified are included within the assessment scenarios. This will require careful pre-planning and organisation to ensure effective allocation and use of the available time.

The practical assessment specification **must** require the apprentice to:

- **Undertake health and safety and/or risk and waste management:**
  - Complete a risk assessment
  - Set out of signing, lighting and guarding
  - Dispose of waste materials
  - Making the site safe, removing plant and equipment

- **Determine action and/or organize tasks:**
  - interpret work instructions as defined in the job task sheet
  - prepare for tasks, including selecting a minimum of six tools and/or equipment, resources, and personal protective equipment (PPE)

- **Check and operate tools and equipment**
- **Locate utility network assets**
- **Excavate**

- **Communicate:**
  - at least one other person for example a co-worker

- **Demonstrate professionalism**

- **Construct, repair, commission, decommission of gas network assets / Test and purge, gas network assets**
  - service laying techniques 16mm – 63mm diameter
  - mains laying techniques - install mains of diameter >90mm
  - complete the installation of gas service pipes from the mains to a property using a variety of techniques. Techniques will include laying services through both 'open cut' and 'insertion' methods, electro-fusion of Polyethylene (PE) pipe of diameter range 16mm to 63mm, mains to service connection for both polyethylene (PE) and metallic mains supply, mains diameters must be a minimum of 90mm PE and 100mm (4") metallic, positioning and connection of service entry points
  - test, purge and commission a new service pipe at both low and medium pressure
  - complete the butt fusion and electro-fusion of PE pipe of diameter range - 90mm to 180mm
  - use both PE and Metallic (Squeeze off and Bag Stop) flow stopping techniques on a pressurised system <75mb
  - connect, test and commission of a new low pressure (LP) PE main of diameter range - 90mm to 180mm utilising at least one metallic to plastic (PECAT adapter) connection

- decommission of a low pressure (LP) gas main through direct purging methods
- **Demonstrate emergency procedures**
- use of breathing apparatus
- apply of gas emergency procedures

Important Note: Although the assessment plan includes for mains in the 90mm to 355mm diameter range, it is **not** expected that the apprentices will need to work on polyethylene (PE) mains exceeding 180mm diameter.

Assessment scenarios should be designed to minimise the need for significant manual handling, including use of the tools, equipment and materials provided. It is **not** envisaged that a second person will be required to support the apprentice with lifting and handling. However, if support is provided, the second person must be a qualified service layer, main layer, or repair operative (as appropriate for the task) and must **not** take an active role in the assessment process, or be involved in the on-programme or lead the apprentice in any way.

Throughout the assessment process, the apprentice **must** be overseen at all times, including during break periods, to ensure that there are no external influences on the assessment.

The Emergency Response part of the practical task(s) should be assessed one-to-one, but the rest of the practical task(s) could be assessed one-to-two and in the latter case the employer and or training provider must provide a responsible person as described below to invigilate the apprentice at all times when the assessor is assessing the other apprentice. It is possible for an assessor to assess two apprentices at the same time, provided it is possible for the assessment processes to be robust. If two apprentices are being assessed at the same time, they must be working separately on different tasks, and they should **not** be in direct eyeline or in communication with each other and must not influence each other in any way. If apprentices are working in a remote location (e.g. in an adjacent room), then the apprentices **must** be overseen by an invigilator when not under the attention of the assessor. The invigilator does not need not to be a qualified assessor, but **must** be a qualified service layer, main layer or repair operative (as appropriate for the task) and must **not** take an active role in the assessment process or have been involved in the delivery of the on-programme and they should **not** lead the apprentice in any way.

An ‘actor’ may be used as part of the scenario for the demonstration of emergency (gas escape) procedures. The person must be utilised to support the assessment process and not interfere with the outcome or lead the apprentice in any way. The person does not need to have any operational gas experience. The independent assessor **must** thoroughly brief this person on their role prior to the start of the assessment.

During the practical assessment the independent assessor **must remain unobstructive** at all times. To maintain demonstrable independence, the independent assessor **must not** have had any prior involvement with the apprentice during the on-programme training and development phase of their apprenticeship or be known to the apprentice.

Example activities

- **Service laying assessment activities:**
- Laying of service using open cut, dead insertion or live insertion

- Connection of a PE service to a PE main
- Drilling of a metallic main for a service connection
- Connection of a PE service to a metallic main
- Electrofusion of a PE service
- Service termination at an external meter box
- Service termination at an internal meter position
- Pressure test of a service at low pressure and medium pressure
- Purging and commissioning of a service
- Disconnection of a gas meter
- Exchange of an emergency control valve

- **Main laying assessment activities:**
- Laying of PE main using open cut, dead insertion or live insertion
- Jointing of a PE main using electrofusion
- Jointing of a PE main by butt fusion
- Jointing of PE main to a metallic main using a bolted connection
- Flow stopping of a PE main using squeeze off
- Flow stopping of a metallic main by bagging off
- Pressure test of a main at low pressure
- Purging and commissioning of a main

- **Repair assessment activities:**
- Use of breathing apparatus
- Installation of a repair clamp
- Joint repair using anaerobics

- **Emergency assessment activities:**
- Response to a public reported external gas escape
- Use of gas detection equipment and interpretation of results
- Prioritisation of actions
- Recording of data

- **New Low Pressure Main and Make Connection Using Squeeze-Off:**
- Lay a section of PE main with at least one electrofusion joint. (Joint to include measures to ensure alignment and successful fusion)
- Pressure test the main to low pressure standards and complete test documentation

- Install a squeeze-off operation on a section of pressurised low pressure main, ensuring security of supply
- Cut out a section of the existing main and tie in the new section of main
- Purge and commission the new section of main
- Remove squeeze-off equipment

- **Make a Butt Fusion Joint:**
- Prepare butt fusion equipment for use.
- Install pipe in the butt fusion machine and prepare ends for jointing
- Fuse pipe sections together
- Allow joint to cool
- Check the bead for quality

- **Lay a New Service from a Low Pressure Metallic Main:**
- Install drilling equipment on pressurise low pressure metallic main
- Drill and tap a hole of the correct size and insert a service tee
- Lay service pipe of the required size
- Connect the service pipe to an external meter box, terminating with an emergency control valve
- Pressure test the low pressure service and complete test documentation
- Connect the service to the service tee
- Purge and commission the service
- Check for leakage

- **Public Reported Gas Escape:**
- Apprentice arrives on site having been given limited information about the report
- Apprentice introduces him/herself and speaks with customer to obtain more information
- Apprentice issues customer with safety advice
- The independent assessor supplies the apprentice with site information throughout the assessment, as appropriate
- Apprentice undertakes internal monitoring using gas detection equipment, recording information
- Apprentice applies evacuation criteria as appropriate
- Apprentice isolates internal installation and applies a tightness test
- Apprentice undertakes and external site search using gas detection equipment, recoding information
- Apprentice determines the source of the escape and takes appropriate action

- **Mains Repair:**
  - There is gas escaping from a pressurised low pressure metallic main
  - Ensure the safety of self and others, and deploy fire extinguishers
  - Put on breathing apparatus, conducting the necessary checks for safe operation
  - Install a leakage clamp on the main and tighten.
  - Check for leakage
  - Remove and stow breathing apparatus

Further Guidance

- All the tasks are to be undertaken in a simulated environment
- Apprentices must be assessed individually
- Independent assessors may only assess one apprentice at any one time. Independent assessor must be technically competent in the work being assessed and be registered and approved by the EUIAS prior to any assessments being scheduled
- Simulations are expected to use compressed air instead of live gas
- The assessor will need to provide realistic 'live gas' gas readings appropriate to the stage of the scenario for the candidate to determine the next action (e.g. for site search, use of gas detection equipment, purging). The methodology must be made clear to the apprentice in advance.
- Assessment scenarios **must not** have been previously used during the on-programme when training apprentices, nor for practice purposes prior to assessment. For on-programme training and practice, alternative scenarios **must** be provided.
- Apprentices must not have prior knowledge of the specifics of assessment scenarios
- Each specified assessment task may be undertaken separately. However, assessment scenarios may combine a number of different tasks, but each specified task must be assessed separately
- Independent assessors **must** use the assessment documentation provided by EUIAS for all practical tasks. One record per task for each apprentice is required
- Each of the practical tasks may be treated individually. If an apprentice fails one practical task this does not mean that other tasks are failed. Re-sits of individual tasks is permitted. All practical tasks **must** be passed in order to complete the practical assessment part of the end-point assessment
- All necessary tools, equipment, materials **must** be provided for apprentices at the start of the Task. It is permissible for these resources to be provided in a manner which requires the apprentice to select items to be used, for example the provision of a variety of tools in a toolbox

- Apprentices must be briefed on the requirements of each practical ask prior to the practical task commencing
- Scenarios must be sited in a location where apprentices will not be disturbed or influenced by others outside of the working area
- Apprentices must wear personal protective equipment for the task and assessment location and employ safe working practices throughout. The independent assessor should stop the assessment if unsafe working practices are identified
- Up to 11 hours is permitted for the completion of all practical tasks, plus 1 hour for the questioning which will take place after the practical assessment. Therefore the 9 practical tasks need to be completed within 11 hours. The independent assessor should allocate time appropriately for each practical task to permit this timescale to be achieved
- Tasks need not be undertaken consecutively. All the practical tasks may be spread over 2 days. However, each individual practical ask must be completed before a break is permitted.

Examples of possible assessment scenarios:

a) Service laying:
Drill and tap a metallic main, install a service tee, lay a service by dead insertion to an external meter box, apply a pressure test, purge and commission.

b) Mainlaying:
Lay a section of dead main and pressure test, Set up a squeeze off on a pressurised PE main, apply squeeze off, cut out a section and install a tee to connect the new main, purge, release squeeze off, test for leakage.

c) Emergency:
Using a simulated row of properties, respond to a report of an outside smell of gas using information provided by the assessor. Undertake site search. Interpret gas readings. Take action to safeguard life and property. Determine actions required.

d) Repair:
Wearing breathing apparatus, apply a repair clamp over a leaking (pressurised) metallic main. Test for leakage.

The independent assessor will ask questions and follow up with supplementary questions if required to test the apprentices underpinning knowledge and/or skills and behaviours where an opportunity to demonstrate them has not occurred during the practical task(s). Questioning must take place after the practical assessment has been completed, so as not to interrupt the apprentices work and to enable sufficiently deep questioning to take place. The independent assessor **must** ask a minimum of six questions to test related underpinning knowledge and behaviours. Additional follow up questions are allowed, to seek clarification and to make an assessment against the grading descriptors.

Sample questions that the independent assessor may ask to underpin the apprentice's knowledge and/or skills and behaviours during the questioning session:

Question 1: How could you tell if an electrofusion and butt fusion joint was made to the required quality?
Supplementary question: What would you do if the joint was of poor quality?

Question 2: What steps would you take to pressure test a low pressure main?
Supplementary question: How would this differ for a medium pressure main?

Question 3: How would you identify if there was any water inside a gas service pipe?
Supplementary question: Explain how you would remove and dispose of water from a gas service?

Question 4: What are the steps for evacuating a property in the event of a gas escape?
Supplementary question: What are the steps for re-occupation after the escape has been repaired?

Question 5:
Justify why it is important to prioritise health, safety and the environment when you were undertaking work to safeguard life and property.
Supplementary question: Provide 2 examples of how you prioritised health, safety and the environment when you were undertaking work to safeguard life and or property.

Question 6: Describe the different types of joints found on metallic mains
Supplementary question: Explain how you would repair leaks from each type of joint

The independent assessor is required to:

- record the depth and breadth of the apprentice's performance and outcome by using the EUIAS documentation specific to the task
- to record valid evidence from the apprentice performance and **not** to adopt a 'tick box' approach will not be accepted
- question the apprentice immediately after completion of the practical assessment and within the overall 12 hour time allowance
- ask questions on topics identified within the assessment plan, based upon work undertaken during the practical assessment
- questions will typically cover practical topics for which it is not feasible to assess within realistic timescales, or in simulated environments and or which have not been demonstrated through the practical skills assessment
- use open questioning techniques to promote the provision of required responses from apprentices, without leading them in any way
- The one-hour time period can be increased by 10% at the discretion of the Independent assessor, to allow the apprentice to complete a task or complete an answer to a question
- should proceed without interruption and be held in a confidential location without interference from others outside. Assessors are required to record in summary the responses to questions provided by candidate using the EUIAS documentation supplied for this purpose.
- following the completion of the assessment (the practical assessment and the questioning), the Independent assessor must apply the guidance provided by the EUIAS to determine the grading appropriate for the apprentice (distinction, pass or fail), based upon the performance of the apprentice as seen by the Independent assessor under assessment conditions.
- make a grade decision and the grade **must not** be influenced by the previous apprentice's

behaviour or performance, nor be influenced by others outside of the assessment process

Important Note: The questioning for the practical assessment is in addition to questioning in the interview which is underpinned by the portfolio.

Note:

- To achieve a pass, grade **all** Pass criteria must be achieved
- To achieve a distinction, grade **all** Pass criteria and Distinction Criteria must be achieved

Template for the practical task planning sheet:

L2 Gas Network Operative - Practice Assessment

Practical Task Planning Form

Apprentice's Full Name		**Date**	
Independent Assessor's Full Name		**Job number**	

Brief task description:
Proposed method and reasoning:
Pipe size – include any calculations required:

Sketch of work to be undertaken	
At the start:	**Upon completion:**

List equipment required:	**List consumables required:**

Apprentice signature		**Date**	
Assessor signature		**Date**	
Once the form is complete proceed with the practical assessment			

L2 Gas Network Operative - Practice Assessment

Example: Completed Practical Task Planning Form – Jobs 1 & 3

Apprentice Name	John Singh	**Date**	**15/06/2021**
Assessor Name	Jinny Sterling	**Job number**	**1**

Brief task description:

Details to be included in this section.

Proposed Lay method and reasoning:

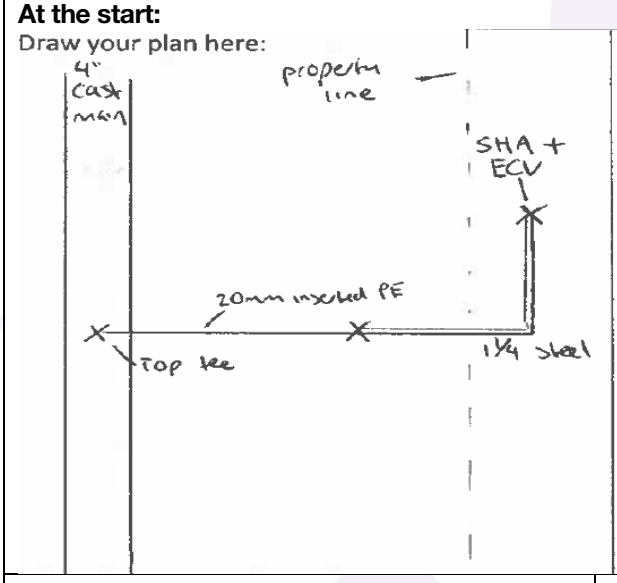
20 mm service off 4” main in preparation for service transfer.

Pipe size – include any calculations required:

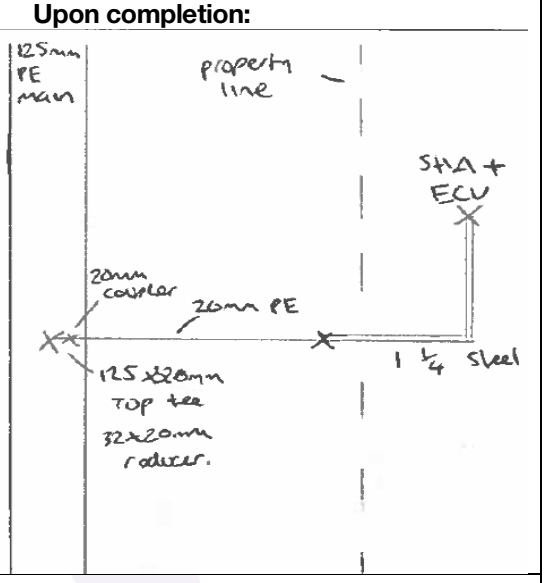
20 mm PE service as per service pressures from SL1.

Sketch of work to be undertaken

At the start:



Upon completion:



List equipment required:

- Volt stick
- 5m 20mm PE
- 1” top tee

List consumables required:

- Jointing command
- LDF
- Annerseal

- Anti-sheer sleeve - Service lead adapter - Red handle ECV - Deburrer - Pipe cutters - T2 pipe grips - Sthlsons - Draw lock tool - Scaper - Pressure gauge - Smooth Jaws - 20 mm coupler - 125 x 320mm top tee - Top tee saddle - Marker pen - Mirror - Fusion box - Land pump	- Blue roll - Nitrate gloves

Apprentice signature	*John Singh*	**Date**	15/06/2021
Independent Assessor signature	*Jinny Sterling*	**Date**	15/06/2021
Once the form is complete proceed with the practical assessment			