ENERGY & UTILITIES INDEPENDENT ASSESSMENT SERVICE

# End Point Assessment Handbook

# Gas Network Craftsperson Rev 2

# Level 3

Version 1.0 published March 2019

# 1. About the Apprenticeship

There are 3 key documents applicable to all apprenticeship standards:

**1.1 Apprenticeship Standard** – detailing the knowledge, Skills and Behaviours (KSBs) of the apprenticeship standard: https://www.instituteforapprenticeships.org/apprenticeship-standards/gas-network-craftsperson/

## GAS NETWORK CRAFTSPERSON

### Overview of the role

**Building, maintaining and repairing parts for the country's gas network, to provide a reliable supply of gas to domestic, commercial and industrial users.**

### Details of standard

#### Occupational profile

The United Kingdom's gas network consists of approximately 286,000 kilometres (175,00 miles) of pipeline that supplies natural gas from on shore terminals through to 21.5 million gas users.

Natural gas is a hazardous substance. The safe operation, control and maintenance of the gas network is essential to avert major loss or interruption to supplies, this includes responding to and managing gas emergency situations to ensure potential safety issues are controlled and remediated without delay. This is the basis of the Gas Network Craftsperson's occupation.

Gas Network Craftsperson's are employed by organisations authorised to transport gas throughout the United Kingdom. These organisations vary from very large companies who own and operate networks that supply towns and cities across a wide geographical area, through to small companies who own independent networks that supply small housing developments with as few as 3 or 4 properties. They could be directly employed by the organisation that owns and/or manages the gas network or by an organisation that contracts their services to the networks.

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**Employers involved in creating the standard:** Scotia Gas Networks, National Grid, Northern Gas Networks, L&G Utilities Ltd, Leven Energy Services, DCD, Utilergy, CMW Utilities Ltd, Butler Construction Ltd, SSE, Morrison Utility Services, Forefront Utilities
**EQA Provider:** Institute for Apprenticeships and Technical Education

**1.2 Apprenticeship Assessment Plan** – detailing the requirements of the end-point assessment https://www.instituteforapprenticeships.org/media/1809/st0205_gas-network-craftsperson_l3_ap_for-publication_19may18.pdf

**1.3 Education and Skills Funding Agency Funding rules** – detailing the rules for the public funding of apprenticeships in England https://www.gov.uk/guidance/sfa-funding-rules

# 2. About the End Point Assessment Gas Network Craftsperson Handbook

This handbook is designed for employers and third-party providers who are delivering or planning to deliver the **Level 3 Gas Network Craftsperson Apprenticeship**. The handbook is intended to provide all the necessary guidance and information required by those key personnel involved in managing, delivering training, assessing, examining or auditing the apprenticeship and as such the contents are detailed and extensive.

Given the importance of developing and delivering a consistently high-quality programme it is expected that all staff involved would wish to read the whole handbook so that they have a clear overview and comprehensive understanding of the scheme. We also recognise that staff commitments are many and that their delivery schedules must meet business as usual activities, so we have set out below the sections that the individual(s) undertaking each key role should read, review, understand and adhere to:

1. Heads of Training and Learning - all of the scheme handbook
2. Lead Trainers and skills trainers - all of the scheme handbook
3. Lead Assessors and assessors - all of the scheme handbook
4. Quality Auditors - all of the scheme handbook
5. Competency Test Examiners
6. Reviewers/Mentors

# 3. Introduction

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They work as part of a larger team, which may include planners, designers, supervisors and managers. They are often deployed to site in pairs or alone, dependent on the activity being undertaken. Good communication skills are essential as they may have to interact with the general public, agencies and emergency services on safety related matters and also provide technical advice to other stakeholders.

# 4. Occupation Specialist Job Roles

The occupation incorporates 4 specialist roles; the main duties and tasks for each role are as follows:

## 4.1 Network Maintenance Craftsperson (Electrical & Instrumentation)

Responsible for maintaining the controls and systems that measure, monitor, analyse and control the performance of the gas network. This forms part of a control system architecture that uses computers, networked data communications and graphical user interfaces for high-level process supervisory management associated with the gas transportation network. This may include the following:

- Installing instrumentation and communications technology associated with the control of gas within the gas transportation network
- Testing and maintaining instrumentation and communications systems associated with the control of gas within the gas transportation network
- Responding to faults and taking action to restore operating systems
- Monitoring and reporting on the performance of electrical and instrumentation control systems

### 4.1.2 Network Maintenance Craftsperson (Pressure Management)

Responsible for maintaining the controls and systems that measure, monitor and analyse pressures and flows within the gas network to ensure the safe and efficient operation of the gas transportation network. This may include the following:

- Installing and maintaining equipment that controls flows and pressures within the gas transportation network in accordance with company procedures
- Responding to faults and taking action to restore systems to full operation
- Monitoring and reporting on the performance of pressure control systems
- Undertaking corrosion monitoring of equipment and pipework and provide reports

### 4.1.3 Network Pipelines Maintenance Craftsperson

Responsible for the maintenance and protection of the gas transportation pipelines and associated connecting plant and equipment to ensure the safe operation of pipelines and prevent damage from third parties. These are specialist maintenance services that may include:

- Under pressure drilling, flow stopping, fabrication, testing, in-line inspection, re-compression and valve repair to facilitate safe and efficient networks
- Installing, maintaining, monitoring and reporting on corrosion prevention systems on pressurised gas pipelines
- Monitoring works adjacent to high pressure pipelines and take action to prevent damage
- Locating and marking the route of high pressure pipelines

### 4.1.4 Emergency Response Craftsperson

Responsible for attending reported gas emergencies to safeguard persons and property. This includes dealing with reported gas escapes both inside and outside of customers' properties and responding to reports of carbon monoxide leakage. This may include the following:

- Responding to reports of gas escapes and taking action to safeguard life and property in accordance with company procedures
- Responding to reports of carbon monoxide and taking action to safeguard life in accordance with company procedures
- Installing and replacing gas meters
- Installing, testing and commissioning internal gas pipework

On completion of the apprenticeship the Emergency Response Craftsperson will be required to become a member of a class of persons approved by the Health and Safety Executive to carry out gas work, this currently requires them to be registered with Gas Safe™.

# 5. Apprenticeship Standards & Assessment Plans

The Gas Network Craftsperson Scheme Handbook is intended for all providers who have been approved by the Energy & Utilities Independent Assessment Service (EUIAS) to develop and deliver programmes leading to the confirmation of competence. Successful completion of the apprenticeship enables candidates to attain Engineering Technician (Eng Tech) status across the four occupational roles: Network Maintenance Craftsperson (Electrical & Instrumentation), Network Maintenance Craftsperson (Pressure Management) Network Pipelines Maintenance Craftsperson and Emergency Response Craftsperson (Gas Emergencies). This industry standard and the associated assessment plans have been developed on behalf of the Government by employers in the Gas Industry and are intended to replace previous related apprenticeship frameworks.

The published industry standard and the high level assessment plan serve to provide a road map for the suggested on-programme learning that needs to occur to meet the occupational role and sets out the requirements for end-point assessment. However, they cannot mandate the associated on programme training or the specific on programme assessment and assurance instruments and methodologies.

The Apprenticeship standard and assessment plan can be located from this web link:
http://www.instituteforapprenticeships.org/apprenticeship-standards/gas-network-craftsperson/

# 6. Scheme Documentation

This scheme handbook has been designed to guide and support employers and their provider partners who have selected the EUIAS as their independent assessment and assurance organisation and where the provider has met the EUIAS standards for Provider Approval. In recognition that each employer and their provider may have access to differing site specific resources and requirements this handbook has been designed to focus on the assessment process rather than the delivery level. The intention throughout has been to provide employers with the flexibility to deploy their own approaches to delivery, on programme assessment and internal quality assurance, while ensuring there is no loss in terms of the quality of the outcomes that will confirm the final grade awarded.

Apprentices who enter their end-point assessment are expected to have received sufficient high quality training from their employer or training provider during their on-programme element to meet the standards and enable a synoptic assessment to be confirmatory of their competence rather than a barrier to achievement. The guidance contained within this

handbook is designed to enable employers or providers to be confident that each apprentice is 'end-point assessment' ready. The final decision on whether to enter the apprentice for their end-point assessment will be determined by the evidence that each apprentice has completed on their on-programme learning including their logbook, progress reviews and tests and assessments.

Where an apprentice does not meet the requirement to enter end-point assessment, there needs to be a remedial or support and improvement programme in place to adequately prepare them to enter end-point assessment. In cases, where an apprentice has been assessed as not being capable of meeting the standards required in their on-programme performance for the role of a Gas Network Craftsperson, then it is anticipated that an employer will seek to reassign these individuals to other job roles through company HR performance procedures.

The Gas Network Craftsperson Apprenticeship is supported by this handbook, the published standards and high level assessment plan, the Quality Assurance Framework for Providers and Programmes, registration documentation and specific technical and assessment documentation for each of the apprenticeship's modules and the pathway undertaken. These additional documents can be requested from enquiries@euias.co.uk

# 7. The EUIAS & Quality Assurance

## 7.1 Role of the EUIAS

The EUIAS is an employer-led assessment and assurance body established to provide the industry's employers with approaches to assessment, assurance and qualifications that are authentic and valid. Its' remit is to develop assessment and assurance methodologies as well as monitor, measure and confirm an apprentice's competence. The EUIAS has responsibility for the secure storage of assessment material, grades and certification and will be responsible for statistical data return to Government appointed stakeholders. A priority activity for the EUIAS has been to support employers as they navigate the new industry standards and assessment plans as part of the Government's English Apprenticeship reforms.

### 7.1.2 Assessment & Assurance Functions

The EUIAS builds on the tried, tested and trusted approaches of each sector to competence monitoring, measuring and reporting using instruments and methods used in each sector and then moderating and standardising across and between companies in order to facilitate a sector-wide system that is consistent, reliable, rigorous and robust. The EUIAS is committed

to quality assurance processes that are effective, efficient and manageable so as to increase the return on investment through greater retention, increased productivity, improved safety standards and a reduction in wastage.

### 7.1.3 Equipment, Facilities & Resources

The Gas Sector is reliant on employees with competence and confidence in safety critical activities. The consequence of this reliance is that the technical training and assessment demands of the new industry standards means that irrespective of whether the apprentice is undergoing on-programme training, undertaking end of module assessments or completing the final end-point assessments, they must have access to realistic working environments on which to practice and gain competence. An apprentice cannot meet the requirements of the industry standards if their only experience is simulated, or where their technical experience is limited due to the lack of exposure to the correct equipment, facilities or resources.

Where a provider cannot meet any or all of the requirements of the technical modules the EUIAS will expect the provider to identify their own shortcomings and provide confirmation of how these will be addressed either through partnership working or outsourcing.

# 8. Technical Experts, Independent Assessors, Invigilators and Markers

## 8.1 Technical Experts

The apprentice's employer nominates technical experts and they must be able to demonstrate competence in gas network operations as conducted by the apprentice's employer, for example experience of working in the gas networks sector at level 3 or above. They should have completed a minimum of 2 days continuing professional development (CPD) relevant to gas networks in the last year.

They may hold or be working towards a recognised assessor award but must have received training from the EUIAS in terms of administering the practical tasks. They must undertake a minimum of 1 day EUIAS training per year. They will complete a statement for submission with the apprentice's report and complete factual accounts of the practical tasks, they will also, as required, provided technical information and interpretation at the technical interviews.

They must be independent of the apprentice and must not have had any involvement with the

apprentice's on-programme training.

## 8.2 Independent Assessors

Independent Assessors are appointed by the EUIAS, they must be independent of the apprentice, the employer and training provider(s); there must be no conflict of interest. They should hold or be working towards an assessor qualification, for example A1, TAQA (Training, Assessment, Quality & Assurance) and have had training from the EUIAS in terms of good assessment practice, operating the assessment tools and grading. They must have experience of working in the gas networks sector at level 3 or above and they should have completed a minimum of 2 days continuing professional development (CPD) relevant to gas networks in the last year; they do not necessarily need to be currently employed within the gas networks. They must undertake a minimum of 1 day EUIAS standardisation training and 1 moderation event per year.

The independent assessor may conduct and assesses either or both assessment methods, awarding a grade as appropriate and recording the assessment outcomes and they will participate in internal quality assurance/standardisation activities and investigations of any assessment irregularities.

## 8.3 Invigilators

Invigilators are appointed by the EUIAS, there are no qualification requirements, but they must be independent of the apprentice, the employer and training provider(s); there must be no conflict of interest.

They are responsible for ensuring that the area selected for the knowledge and skills assessment meets EUIAS requirements and that the knowledge and skills assessment is delivered in accordance with EUIAS requirements.

They are also responsible for ensuring that all assessment documentation is securely returned to the EUIAS.

## 8.4 Markers

Markers are appointed by the EUIAS, there are no qualification requirements, but they must be independent of the apprentice, the employer and training provider(s); there must be no conflict of interest.

They are responsible for ensuring that the knowledge and skills assessment paper is accurately completed and for marking the knowledge and skills assessment paper in line with guidance provided by the EUIAS.

## 8.5 Technical Expert/Assessor/Invigilator/Marker Training

The EUIAS provides training to ensure that all persons engaged in the assessment process have a clear understanding of the end-point assessment documentation requirements and their roles and responsibilities within this process. All will be required to acknowledge and sign the end point assessment code of conduct documentation.

Attendance at the annual training events is compulsory and where assessment errors occur as the result of a failure to attend these events the technical expert / assessor and will be deemed responsible. The EUIAS reserves the right to remove a technical expert/assessor from its register for on the grounds of found or suspected malpractice and for non-attendance at training and standardisation events – a minimum attendance of one each per annum is required. A schedule of training events is published on the EUIAS website at http://www.euias.co.uk

# 9 On Programme Training and Assessment

## 9.1 The Assessment Approach for Apprentices on the Gas Network Craftsperson

The standards used within the Level 3 Gas Network Craftsperson are divided into core and specialist requirements as follows:

- Core requirements: Knowledge; Skills; and Behaviours
- Pathway specific Requirements: Network Maintenance Craftsperson (Electrical & Instrumentation), Network Maintenance Craftsperson (Pressure Management) Network pipelines maintenance craftsperson and Emergency Response Craftsperson (Gas Emergencies)

Employer members of the Gas Network Forum developed the Level 3 Gas Network Standards and assessment plans.

The published high level assessment plan focuses solely on the end-point assessment (EPA) and an apprentice's performance during the EPA determines whether they have passed or failed their apprenticeship. The EUIAS recognises the importance of on programme assessment to the sector, to employers and to apprentices as a means of monitoring, recording

and reporting progress. In that context the EUIAS suggests that employers may wish to follow the 3 stages of on programme knowledge and skills development:

a) Core Skills and Knowledge (Induction)

b) Knowledge Training

c) Workplace Training

## 9.2 Stages of the on programme

### Stage 1: Induction

This Induction phase of the apprenticeship establishes the core skills, knowledge and understanding of each apprentice before their on-programme experience. The Induction is delivered during the early stages of the programme to provide an initial foundation of industry related skills and knowledge on which all subsequent modules of training will build upon. The end of module assessments are central to facilitating progress through the programme and could be included as part of each apprentice's logbook.

The aim of this phase should be to ensure apprentices are trained to work safely at all times. It should provide insight on employer and co-worker expectations and how and where the apprentice can seek guidance and support. The acquisition of these key skills provides a vital foundation for the apprenticeship.

### Stage 2: Knowledge Training

To ensure development of the full range of knowledge required for this apprenticeship, a technical knowledge solution will be developed by employers / training providers. Training should include engineering and maths relevant to the industry and set in that context; and provide the range of underpinning knowledge required to accelerate skills development and successfully tackle the end-point assessment.

| **Suggested Technical Knowledge - Assessment activities may consist of:** |
| --- |
| • **Assignments** – written or practical work set, marked and graded against the specific module/options |

- **Knowledge assessments** – set, marked and graded against the specific core modules and specific requirements

### Stage 3: Workplace Training

Stage 3 should be when greater technical skill and knowledge is acquired. As the apprentice progresses through their training, it is suggested that they are assessed on particular tasks or procedures or items of equipment. This will enable apprentices to build up the full range of skills, knowledge and behaviours required to successfully complete the end-point assessment.

| **Suggested workplace training and development - Assessment activities may consist of:** |
|---|
| • **Work log** – write-up of practical activities, of skills and competences (authorisation assessments)<br>• **Observation** – practical observation of work activity in terms of quality and behaviour<br>• **Review meetings** |

## 9.3 On programme evidence and assessment

In the last 12 months of their apprenticeship, the Apprentices will be required to gather evidence of on site activities for inclusion in their logbook. To ensure development of the full range of knowledge required for this apprenticeship, it is suggested that the requirements of the apprentice standard are followed. This evidence will be reviewed by the employers Technical Expert as part of the end point assessment process and will be used as the basis of the technical interview conducted by the EUIAS independent assessor.

## 9.4 Core Knowledge

### 9.1.4 Gas Network Craftsperson's must know and understand:

- Company testing, and commissioning procedures needed to establish the condition of gas assets, equipment, network infrastructure and the actions needed as a result of the tests. This includes both practical applications and the use of diagnostic techniques and IT systems

- The requirements of the Gas Safety (Management) Regulations as relevant to their role, this being supported through company specific procedures involved in the practical installation and maintenance of gas network assets

- The requirements of Health and safety standards and regulations, and environmental and regulatory requirements, including; The Health and Safety at Work Act Dangerous Substances Explosive Atmospheres Regulations, The ATEX Directives, The Management of Health and Safety regulations, PUWER, Working at Height Regulations, Confined spaces Regulations, COSHH, PPE Regulations, RIDDOR, Noise at work regulations, Control of Asbestos regulations and the Manual Handling Operations Regulations

- Company maintenance practices, processes and procedures associated with gas network systems, controls and equipment

- Gas engineering and mechanical or electric principles and processes that underpin the location, diagnosis and rectification of faults

- Company policies, procedures and engineering instructions as specified by the employer

## 9.5 Core Skills

### 9.1.5 Gas Network Craftsperson's have the following skills:

- Undertake and document risk assessments in accordance with company procedures
- Comply with workplace health, safety & environmental practices and regulations, maintaining a safe and secure working environment
- Follow engineering instructions and company procedures to complete tasks safely and on-time
- Undertake inspection and examination of network assets in order to maintain the safe and compliant operation of the network to ensure the integrity, safety and security of supply
- Maintain and/or install gas engineering assets, components and associated equipment.
- Install, test, purge and commission gas network assets
- Operate powered tools and equipment, such as drills, angle grinders, brush cutters and shot blasting equipment as required for network maintenance operations
- Use approved gas detection equipment to ensure safe environment
- Use Personal Protective Equipment (PPE) and safety equipment in accordance with manufacturer's instructions and employer policy

- Obtain and analyse asset condition and performance information to facilitate decision making
- Identify, organise and use resources effectively to complete tasks, with consideration for cost, quality, safety, security and environmental impact
- Through risk assessment, minimise risks to life, property and the environment when undertaking work activities
- Accurately record job information, complete job reports and process
- Liaise with gas consumers, statutory agencies and members of the public in order to ensure their safety
- Accurately update company systems with details of work undertaken

## 9.6 Core Behaviours

- Display a self-disciplined, self-motivated approach
- Deliver a polite, courteous professional service to all customers, stakeholders and members of the public as appropriate
- Demonstrate and apply a safety first approach
- Accept accountability when undertaking individual and team tasks
- Follows instruction from appropriate supervision, and makes decisions when required
- Quality-focussed and professional in work and in personal standards
- Recognise personal limitations and seek advice from managers, experts and specialists when required
- Accepts responsibility for work undertaken
- Receptive to the needs and concerns of others, especially where related to diversity and equality
- Committed to carrying out and recording Continued Professional Development necessary to maintain and enhance competence
- Exercises responsibilities in an ethical manner
- Interacts with people and approaches work activities in a way that contributes to continuous self-improvement

# 10 Specific Knowledge and Skills Requirements for each Role

## 10.1 Network Maintenance Craftsperson (Electrical & Instrumentation)

### 10.1.2 Skills Requirements

- Apply electrical theories and principles and use equipment to carry out diagnostic fault finding procedures
- Inspect, maintain, repair, overhaul test and calibrate instrumentation and control equipment and circuits in accordance with company procedures
- Maintain site lighting and fixed and portable equipment which may include generators, batteries and associated equipment
- Carry out cable testing across a range of voltages to ensure safety and suitability for use
- Install, maintain and dismantle instruments, controllers, probes, attachments, cabling, meters and display units
- Configure telemetry outstation and internal systems
- Identify and resolve data quality and calibration issues
- Test, calibrate and validate fixed and portable analogue and digital instrumentation using approved procedures and standards
- Repair, maintain, configure and calibrate field instrumentation, communication devices and associated equipment used in system and process control
- Use standards and specifications to improve the information gathered by telemetry data
- Inspect and maintain security equipment, telecommunication devices and alarm systems
- Carry out isolation procedures to ensure process or system stability and the safety of personnel when carrying out operations
- Provide support to day-to-day users of instrumentation and control systems
- Ensure consistent and valid data is available for business and regulation purposes
- Apply electrical skills to install, maintain and dismantle a wide range of plant, machinery and components

### 10.1.3 Knowledge Requirements

- The safety processes to be applied when testing for voltages across the range likely to be encountered
- The permitry requirements when maintaining or configuring telemetry systems or undertaking works that may initiate system alarms

- Recognise the processes to be followed in order to identify and resolve data quality and calibration issues
- Understand how to test and calibrate instrumentation and control equipment in accordance with company specific procedures
- The theories used to maintain, test and calibrate electrical equipment in line with company specific procedures
- Understand how to safely apply diagnostic fault finding principles to electrical systems
- Identify relevant, company specific procedures and know how to access such documentation
- Legislative requirements affecting electrical works and be able to describe how such legislation may affect them
- The hazards that could be encountered when maintaining both fixed and portable electrical equipment
- Understand why safe isolation procedures must be followed when carrying out electrical or instrumentation operations

## 10.2 Network Maintenance Craftsperson (Pressure Management)

### 10.2.1 Skills Requirements

- Apply mechanical theories and principles for example thermo dynamics and laminar flow theories, in order to carry out diagnostic fault finding procedures
- Carry out remote pressure monitoring & control on the gas network
- Inspect and monitor mechanical systems and equipment in order to ensure safety and suitability for service
- Undertake corrosion inspection activities
- Maintain, dismantle and repair mechanical equipment and components
- Test mechanical equipment and systems to ensure integrity, safety and security of supply
- Assist in installing mechanical systems and equipment
- Install, maintain and dismantle a wide range of complex plant, machinery and components including; pressure regulators, safety devices, system protection devices and monitoring equipment
- Consult design specifications to analyse and calculate mechanical system parameters and rectification procedures
- Interpret plans and drawings to install, position or re-locate mechanical equipment and components
- Test, service and repair mechanical equipment as part of planned preventative maintenance and/or reactive maintenance programmes
- Install mechanical components including regulators, filters, valves, compressor equipment

- Maintain mechanical components including regulators, filters, valves, compressor equipment
- Apply pressure reduction techniques to assist in dealing with gas emergencies
- Inspect and maintain condition monitoring equipment
- Locate and avoid underground plant and equipment prior to and whilst undertaking activities
- Install signing, lighting and guarding system

### 10.2.2 Knowledge Requirements

- Understand how to apply diagnostic fault finding procedures to pressure control equipment
- Understand how to operate the systems and processes used for remote pressure monitoring & control of the gas network
- The permitry requirements when maintaining or configuring pressure control equipment
- Company specific and legislative requirements for the inspection and monitoring of mechanical pressure control systems and equipment
- The requirements for corrosion inspection activities in line with the requirements of both the pressure systems safety regulations and pipeline safety regulations
- The hazards associated with working on systems that contain pressurised gas
- The security of gas supply implications when undertaking pressure control work operations
- The implications of the pressure systems safety regulations when assessing the suitability of equipment to be used
- The safety processes to be followed when planning to access pressure control equipment
- The New Roads and Street Works Act requirements for the provision of signing, lighting and guarding when working in or adjacent to the public highways

## 10.3 Network Pipelines Maintenance Craftsperson

### 10.3.1 Skills Requirements

- Apply non-destructive testing theories and principles in order to carry out diagnostic fault finding procedures
- Apply the theories and principles of integrity testing, purging commissioning and de-commission of gas pipelines and associated equipment and components
- Inspect, monitor, maintain, dismantle, install and repair pipeline systems and equipment for example; flow regulators, safety devices, system protection devices, measurement devices and monitoring equipment
- Remove, repair and replace components of gas transportation pipelines and associated equipment

- Undertake corrosion prevention activities i.e. cathodic protection systems and monitoring, coating and wrapping
- Take action to prevent third parties causing damage to gas transportation pipeline assets and equipment i.e. tracing, marking, monitoring third party activities and responding to encroachments
- Liaise with relevant land owners and third parties e.g. statutory agencies and members of the public
- Consult design specifications to analyse and calculate pipeline system parameters and rectification procedures
- Interpret plans and drawings to install, position or re-locate pipeline equipment and components
- Test, service and repair pipeline equipment as part of planned preventative maintenance and/or reactive maintenance programmes
- Operate specialised tools and equipment for pipeline maintenance operations for example; in line inspection tools, damage assessment, intelligent pigging, valve repairs, flow stopping and under pressure drilling
- Locate and avoid underground plant and equipment prior to and whilst undertaking activities
- Install signing, lighting and guarding systems
- Liaise with emergency services and other statutory authorities as necessary
- Organise additional resources to facilitate repairs as required
- Respond to reported pipeline gas emergencies

### 10.3.2 Knowledge Requirements

- The health and safety requirements when conducting operations on gas pipeline systems
- Understand how to test and confirm the suitability and effectiveness of corrosion control measures
- The requirements for the testing and inspection of pipelines in accordance with the Pipeline safety and Pressure systems safety regulations
- The permitry requirements when entering or working on gas operational sites
- The company specific requirements for the inspection of pipeline systems and associated systems and equipment, including the frequency of such inspection
- The implications of and assessment of damage sustained to pipelines by third party persons
- The hazards and permitry requirements associated with working on or in proximity of pipelines that contain pressurised gas
- The implications of the pressure systems safety regulations when assessing the suitability of equipment to be used
- Understand how to apply company specific procedures when responding to reported pipeline gas emergencies

- The New Roads and Street Works Act requirements for the provision of signing, lighting and guarding when working in or adjacent to the public highways

## 10.4 Emergency Response Craftsperson

### 10.4.1 Skills Requirements

- Respond to public reported upstream gas emergencies, including damage to or failure of gas mains and services that supply a consumer's premise
- Respond to public reported downstream gas emergencies, including reported gas escapes inside customers properties and reports of carbon monoxide
- Carry out site investigations in relation to gas emergencies, in line with company procedures
- Use gas detection equipment to identify gas concentrations
- Interpret gas readings to determine the safety of the site
- Apply evacuation procedures where required
- Apply the industry unsafe situations procedures
- Install and exchange gas meters and pressure regulators
- Install domestic pipework
- Tightness test, purge, commission and de-commission domestic gas pipework
- Tightness test, purge, commission and de-commission non-domestic gas pipework
- Locate and avoid underground plant and equipment whilst undertaking activities in the highway
- Liaise with emergency services and other statutory authorities as necessary
- Organise additional resources to facilitate repairs as required

### 10.4.2 Knowledge Requirements

- The safety actions to be applied where critical gas level concentrations are encountered when dealing with reported gas emergencies
- The requirements of the Gas Safety (Management) Regulations when dealing with reported gas emergencies
- The requirements of the relevant British standards in relation to the safe installation of gas appliances, pipework and meters
- Understand how to identify gas appliances and installations that are not compliant with industry standards and may be deemed as unsafe
- Understand how to comply with the requirements of the Gas Industry Unsafe Situations Procedure, including RIDDOR reporting requirements
- Understand how to recognise the signs and symptoms of suspected carbon monoxide poisoning
- Describe the requirements for the application of gas tightness testing procedures

- The New Roads and Street Works Act requirements for the provision of signing, lighting and guarding when working in or adjacent to the public highways
- Understand how to apply suitable control measures for the location and avoidance of supply apparatus and sub-structures prior to and whilst working on gas network assets
- Understand when to liaise with emergency services and other statutory authorities as necessary

## 10.5 Observation of Behaviours and Skills

Apprentices work in an environment where their safety, the safety of those around them and the equipment they work on are of paramount importance. Therefore, observation of behaviours and approach are an integral and developing part of the apprentice progression throughout the apprenticeship and should be assessed using existing supervisory practice and as part of the on-going assessment.

## 10.6 Suggested training/development meetings

It is suggested that training and assessment is agreed and documented in a personal training/development plan, together with a behavioural review. These review meetings should be programmed to ensure training/development needs are met and supported. This could include additional training, or ways of accelerating learning, as required by the apprentice. This will typically be an interview with their line manager but may include colleagues from Human Resources. Feedback from mentors and team members may present the opportunity for capture the behavioural skills of the apprentice and could be included to contribute towards individual personalised training/development plans.

# 11. On Programme Training and Assessment

The industry apprenticeship standard for Gas Network Craftsperson has been published with a high level assessment plan which details the components of, approaches to, and requirements for, end-point-assessment (EPA). The EUIAS has designed and agreed a particular approach to EPA that will ensure that all aspects of competence, the technical knowledge, skills and understanding as well as the professional behaviours of each candidate are appropriately assessed and that judgements are consistent across the sector. The approaches and instruments developed and deployed are all based on methods of assessment and assurance that are tried, tested and trusted by employers as they have competence in their ability to discriminate and measure competence with accuracy.

Those responsible for assessment and IQA must have appropriate plans in place for assessing and internally assuring decisions as well as the records to underpin them. It is mandatory to use EUIAS developed documentation. Technical Experts and Independent assessors must ensure all key elements of the assessment and any IQA processes are appropriately recorded and capable of detailed challenge and scrutiny as part of the independent assessment and assurance procedures.

Apprentices will be subject to a number of assessments during the on programme phases and towards the end of their programme ranging from formative assessment to determine progress, summative assessment to monitor sustained understanding of modules or groups of modules and end-point assessment that determines the apprentice's achievement and final grade.

## 11.1 End-point Assessment Tools

Successful achievement of the end-point assessment will lead to final certification of the apprenticeship and demonstrate that the apprentice is a fully authorised competent worker, who can work safely and confidently to maintain or repair a range of systems. It uses the following assessment tools:

- Knowledge and Skills Assessment consisting of 50 questions invigilated by an approved, independent EUIAS invigilator. Successful completion of this assessment will trigger the end point assessment process. This must be successfully completed before any other EPA activity can be undertaken

- Technical interview, consisting of two parts these being:

- Practical tasks (Trade Tests) delivered by the employer nominated Technical Expert using assessment materials as supplied by EUIAS. An interview will follow the successful completion of the practical tasks. This being delivered by an independent Assessor who will ask 10 questions to confirm the authenticity of the apprentices' work. The final decision of the outcome resides with the Independent Assessor this decision being subject to EUIAS moderation.

- Logbook review (pre-gateway), the evidence contained within the logbook must be mapped to the core and specific Knowledge Skills and Behaviours (KSBs) for the role. It should contain reviews to demonstrate the progression made towards competence across the entire standard. An interview will be undertaken this being based on the content of the Logbook. An Independent Assessor who will ask 10 questions to confirm the authenticity of the evidence presented in the logbook will deliver the interview. The final decision of the assessment outcome resides with the Independent Assessor this decision being subject to EUIAS moderation.

The end-point assessment may be completed over a six months period to accommodate work scheduling and cost effective planning of resources.

Although the apprentice should only be recommended for end-point assessment when they are ready, employers should have a remediation process in place to support any candidate who fails to meet the conditions of the end-point assessment.

## 11.2 Method 1: Knowledge and Skills Assessment

Apprentices will be required to complete a standardised knowledge and Skills assessment at the beginning of the end point assessment process. The knowledge and skills assessment will assess apprentices against the core and their option knowledge and skills.

**Successful completion of the knowledge and skills assessment will trigger the end-point assessment process.**

The assessment will enable apprentices to demonstrate knowledge across the Gas Network Craftsperson Standard - core and specific requirements, as appropriate i.e. Network Maintenance Craftsperson (Electrical & Instrumentation), Network Maintenance Craftsperson (Pressure Management), Network Pipelines Maintenance Craftsperson and Emergency Response Craftsperson (Gas Emergencies).

Employers are requested to provide a minimum of 28 working days' notice to the EUIAS to allow the knowledge assessment papers to be prepared and an invigilator appointed. The notification must include the names and ULRN of the persons to be presented.

**Apprentices must take the knowledge and skills assessment in the presence of**

**an EUIAS approved and appointed independent administrator/invigilator.**

The maximum administrator and or invigilator to apprentice ratio will be one to 12.

The knowledge test will consist of 50 multiple-choice questions, which could include questions where calculations are required to determine the correct answer. Each multiple-choice question will present the apprentice with a minimum of four options, from which the apprentice must select one correct option. Each multiple-choice question answered correctly will be assigned 1 mark, any incorrect, missing or spoiled answers will be assigned 0 marks.

The knowledge and skills assessment will be closed book and the apprentices have 75 minutes to complete the knowledge and skills assessment. A pass will be a minimum of 70% with a distinction for this element awarded to those with 90% or above.

Look up tables where required, will be supplied by EUIAS in consultation with the employer to ensure the correct tables are used.

Knowledge and skills assessments will initially be paper-based, the EUIAS will inform the employers if assessments are made available electronically.

The knowledge and skills assessment must be delivered in a quiet and private room with chairs and a standard or larger sized desk available for each apprentice; the desk should be no smaller than 800 x 800mm. Where multiple apprentices are undertaking the knowledge and skills assessment at the same time, there should be a minimum distance of 1.2 metres from the front of any desk to the rear of any other desk and the sideways distance between desks should be not less than 1.2 metres between each apprentices' desk. This could be delivered at a venue selected by the employer or the EUIAS.

In all cases, the invigilator must authenticate the right of the candidate presented to sit the assessment. Candidates shall provide a recognised means of photographic identification on the day of the knowledge assessment, failure to do so will not allow the apprentice to undertake the knowledge assessment.

All question and answer papers will be returned to the EUIAS on completion of the assessment. Any individual shall not retain question or answer papers and copies of such must not be requested. Where either question or answer papers are not returned, this could invalidate the knowledge assessment for the whole cohort.

**The invigilator will not enter in to any discussion concerning the question papers, should concerns regarding the validity of questions exist, such concerns should be put in writing to the EUIAS.**

EUIAS markers following the EUIAS marking guidelines will mark the knowledge assessment papers. The employer will be formally notified within 7 working days, following completion of the knowledge assessment on the outcomes.

In the event of re-sits or re-takes of knowledge assessment papers a remedial plan must be put in place by the employer to address any knowledge gaps. The EUIAS request sufficient

notification of re-sit dates as time will be needed to prepare a different question paper and arrange for an invigilator to attend, please note re-sits will attract additional cost.

## 11.3 Method 2 – technical interview, underpinned by logbook

An independent assessor will conduct a technical interview with an apprentice, in the presence of a technical expert from the apprentice's employer.

The technical expert's role is to provide context for the independent assessor with clarifications around specific company policies and procedures and may be the same person that observed the practical task. During the interview they must not provide information on behalf of the apprentice, ask the apprentice questions or influence the apprentice in any way. The technical expert must not amplify or clarify points made by the apprentice. The end point assessment judgement rests solely with the independent assessor whom will grade the technical interview.

Apprentices must draw their responses from evidence in their logbook to provide supporting evidence, the interview will be based around work activities within the logbook, but the evidence contained within the logbook will not be directly assessed. The logbook must include the technical expert's factual account as a witness testimony of the practical tasks completed by the apprentice during the EPA period.

The practical task, logbook submission and subsequent interviews must be scheduled after the apprentices anticipated completion of the knowledge and skills assessment. The EUIAS request a minimum of 28 working days notification of the planned logbook submission date. This will allow the selection and appointment of a suitably competent and approved independent assessor for conducting the interview. The apprentice's logbook must be submitted within one-week of the practical task completion and the technical interview will typically be conducted within three-weeks of practical task completion.

The technical interview will last 2 hours in total +/-10% and will be conducted in two sessions, each lasting one-hour +/-10%, with a 15-20 minute break between each session.

The EUIAS will produce sample questions for independent assessors to use and forms for the recording and documenting of the interview along with a grading guidance to aid consistency in delivery.

**Session 1** will only focus on the practical task (post gateway evidence) and the independent assessor must ask 10 open questions relating to the practical task, to confirm authenticity of the work and assess underpinning knowledge, skills and behaviours relating to the task.

**Session 2** will only focus on pre-gateway evidence in the logbook and the independent assessor must ask 10 questions relating to this evidence.

Within both sessions, further follow-up questions are allowed to probe into the detail in order to satisfy the independent assessor of the depth and breadth of competence the apprentice has achieved. A greater depth of understanding will lead to higher grading of the apprentice. Independent assessors must assess the evidence from both interview sessions holistically against the grading criteria as determined by the EUIAS.

## 11.4 Logbook requirements

Apprentices must compile a logbook containing evidence to demonstrate the KSB's that will be assessed by the technical interview. The logbook evidence will be the source of questioning for the independent assessor but will not be directly assessed by them.

Logbook evidence will be separated into two parts:

- **Part 1** will contain the post-gateway evidence; a factual account of the practical task from the employer's technical expert and this will be the basis for session 1 of the interview process

- **Part 2** will contain the pre-gateway (on-programme) logbook evidence this will inform session 2 of the interview

### 11.4.1 Part 1 - Practical tasks (Trade Tests)

During the EPA period apprentices must complete a practical task typical of those undertaken by a gas network craftsperson. A technical expert must administer the practical task. The technical expert must complete a factual account of the task, using the appropriate recording templates as provided by the EUIAS. The factual account will be used to inform the questioning in session 1 of the interview. The practical tasks cannot be referenced in the interview for session 2.

## 12.0 The outlines for the practical tasks for each pathway are outlined below:

## 12.1 Network maintenance craftsperson (electrical & instrumentation)

### 12.1.1 Instrumentation Fault diagnosis and repair

This should be carried out on a minimum of three of the following types of instrumentation and control equipment:

- Pressure (such as absolute, gauge, vacuum)
- Flow (such as orifice plate, venturi tube, ultrasonic)
- Level (such as floats, displacer, differential pressure cells)
- Temperature (such as thermocouples, resistance, infra-red, thermal imaging)

- Fiscal metering – Gas
- Detection and alarm (such as smoke, heat, gas)
- Recorders and indicators
- Telemetry systems (such as master station, outstation, stand-alone systems)
- Valves and valve mechanisms (such as control valves and valve actuators)

### 12.1.2 Electrical fault diagnosis and repair

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

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

## 12.2 Network maintenance craftsperson (pressure management)

- The installation of a below 7bar single stream regulator system including all auxiliary controls and pipework
- Testing and commissioning of the installed single stream regulator system
- Completing functional checks on below 7bar twin stream regulator installations
- Completing functional checks on above 7bar twin stream regulator installations
- The fault diagnosis and repair of a pressure control system including component exchange

## 12.3 Network pipelines maintenance craftsperson

### 12.3.1 Pipeline maintenance

- Installing cathodic protection equipment - to include sacrificial anode, connecting to a cable and test post ad commissioning
- Monitoring of CP associated equipment to include SAC and impressed current systems
- Fault finding on SAC and impressed current CP schemes
- The monitoring of third party works in the vicinity of HP pipelines and associated equipment, to include walking, vantage and aerial surveys
- Inspection of pipeline coatings, including VSO2 inspection

- Main line valve maintenance activities

### 12.3.2 Pipeline maintenance operations

- Carrying out under pressure drilling
- Demonstrate Flow stopping techniques
- Demonstrate Pipeline fabrication & testing
- Safe isolation, venting & purging of live gas pipelines
- Complete online and in-line inspections
- Undertake re-compression and valve repairs

## 12.4 Emergency response craftsperson

- Upstream Gas Emergencies
- Downstream Gas Emergencies
- Safe and unsafe combustion of natural gas
- The installation and commissioning of medium pressure regulators
- The installation of domestic gas pipework and meters
- Tightness testing and purging of domestic natural gas installations
- Tightness testing and purging of non-domestic natural gas installations
- Application of the gas industry unsafe situations procedures

## 13.0 Practical Tasks and Logbook

The employer's nominated technical expert will typically deliver the Practical Tasks. This could be in the workplace or in a simulated realistic working environment. All facilities used for the delivery of practical tasks must be fully compliant with all legislative requirements.

Practical tasks should not be conducted on equipment previously used for training purposes and Practical tasks must have variability in the scenario's and faults set.

The Technical Expert will brief the requirements of the practical task to the Apprentice. All practical facilities are subject to and technical experts will be subject to inspection by representatives of the EUIAS.

The part 1/ session 1 interview will follow the successful completion of the practical tasks and submission of the logbook. The interview will be conducted by an EUIAS approved and appointed independent assessor, this person must be independent of the employer, the training provider and there must be no actual or potential conflict of interest with the employer, the training provider or the apprentice. The final decision of the assessment outcome for the

practical tasks resides with the Independent Assessor this being subject to moderation by a nominated representative of the EUIAS.

This will be graded as Fail, Pass or Distinction.

EUIAS documentation for recording of the practical task will be supplied as required to the approved Technical Expert.

## 13.1 Session 1: Practical Tasks - Interview

The Independent assessors will review the practical task documentation as supplied by the employer's technical expert. From this, the independent assessor will select a number of activities undertaken by the apprentice. The areas being questioned upon should be made known to the apprentice at the point of interview.

The apprentice should then anticipate being questioned around the following topic areas:

- Describe how their working practices consistently ensure the health & safety of themselves and others
- Describe how they evaluate risk and implement and reviews control measures to ensure the safety, security and integrity of supply
- Describe how they planned undertook and completed their work in a competent manner
- List the company specific work procedures that apply to the tasks undertaken
- Describe how they ensure the company specific work procedures are adhered to
- Describe how they ensure a safe work environment is maintained at all times
- Detail the safety process and engineering requirements of the task they undertook
- Explain how they use tools, equipment and gas detection devices
- Explain how the engineering or process outputs meet company specific requirements
- Detail what documentation need to be completed and how this is achieved

EUIAS documentation for recording of the session 1 - practical task interview will be supplied as required to the approved Independent Assessor.

## 13.2 Part 2 - Logbook requirements

During the last 12 months of the on programme period, apprentices must collect and collate evidence against the Knowledge Skills and Behaviours (KSB) as required of the Gas Network Craftsperson assessment plan.

The logbook must contain direct observation of knowledge and skills development or formative assessments along with the inclusion of completed and recorded reviews to determine

progression towards competence across the entire occupational standard. Evidence sources may include; certificates of training, job cards and work records, maintenance records, risk assessment documentation and photographs of workplace activities etc. other evidence sources are allowable, however the logbook cannot include any methods of self-assessment.

The logbook must contain a minimum of two pieces of evidence mapped to each of the respective Knowledge, Skills and Behaviours for both the core and selected option of the apprenticeship this again is as outlined in the assessment plan, it is likely that each piece of evidence may demonstrate more than one KSB.

The evidence provided must be valid and attributable to the apprentice, with a qualitative as opposed to quantitative approach.

Logbook guidance and sample mapping tools are available from the EUIAS on request.

This will be graded as Fail, Pass or Distinction.

For apprentices completing the Emergency Response Craftsperson option, the logbook must also meet the industry requirements for the standards of training in gas work. Such evidence must be referenced against the relevant domestic natural gas training specification, details of which are currently available from: http://www.euskills.co.uk/matters-gas-safety-criteria

## 13.3 Session 2: Logbook – Interview

The Independent assessors will use the apprentice's logbook as the basis for the source of questioning. The logbook must contain the documentation generated from the Practical tasks, but this must not be included in any part of the questioning in session 2 of the interview. The independent assessor may select a number of pieces of evidence from the apprentice's logbook, although it is preferred that a single work activity is focussed upon. The activity on which the questions are based should be made known to the apprentice at the point of interview.

The apprentice should then anticipate being questioned around the following topic areas:

- Identification of legislation and regulations applicable to their role
- Identify hazards they frequently encounter as part of their work activities and from the hazards identified explain how the risk from this can be mitigated
- Explain what they consider constitutes good customer communication
- Describe how they prepare themselves for carrying out a specific task
- List company specific procedures relevant to their role and describe how they comply with these

- Describe how they comply with continuing their professional development requirements
- Describes the testing procedure for an item of plant, installation or piece of equipment they encounter on a daily basis
- Detail how they interpret the results of tests undertaken for an item of plant, an installation or piece of equipment
- Describe where they use mathematical calculations to determine operating or safety parameters as part of their role
- Describes instances where they have worked effectively as an individual or as part of a team

EUIAS documentation for recording of the session 2 - logbook interview will be supplied as required to the approved Independent Assessor.

## 14.0 Re-sit and Re-takes

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

EPA methods may include, the knowledge and skills assessment, the practical tasks or components thereof, i.e. the individual practical assessments that when successfully completed, combine together to form the complete practical task, the practical task interview and the logbook interview.

The employer determines if a re-sit or re-take is the most appropriate course of action.

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

Re-sits and re-takes will be capped at pass, which means a candidate is not able to achieve a distinction in a re-sit/re-take, unless there are extenuating circumstances.

Where an apprentice fails one or more EPA methods or in the case of the practical tasks one of more of the individual practical assessments, the apprentice should be offered the opportunity to re-sit or re-take the EPA method or practical assessment as appropriate.

The opportunity for appropriate training or coaching must be offered to the apprentice prior to the re-sit or re-take.

All re-sits or re-takes must be within the EPA timeframe and administered where practicable, using different assessment materials as supplied by the EUIAS. It is recognised that some practical assessment may not be able to facilitate much variation in the task.

The first re-sit or re-take will be classified as the second attempt.

Should an apprentice on the second attempt fail one or more EPA methods or in the case of the practical tasks, one of more of the practical assessments, an action plan should be

developed for the apprentice to address the performance or knowledge criteria they failed to complete.

When the performance or knowledge gaps have been addressed, the apprentice should be offered the opportunity to re-sit or re-take the EPA method or practical task for a third time.

Where an apprentice fails to successfully complete the third attempt, an agreed action plan should be developed and at the employer's discretion, consideration must be given to removing the apprentice from the end point assessment process.

Failures at the third attempt do not preclude the apprentice from undertaking end point assessment at a later date, however in such cases the whole end-point assessment should be undertaken and not the individual methods or practical tasks previously failed.

A record of all re-sits and re-takes must be made, and information relating to these should be made available to EUIAS on request.

Re-sits and re-takes will be capped at pass, this means a candidate is not able to be graded as distinction in any re-sit/re-take, unless there are extenuating circumstances.

# 15.0 Location

Where practical tasks are conducted in the workplace, risk assessments and method statements will need to be in place to cater for the competency assessment of all apprentices. Where the technical expert is not the Asset Owner, it is their responsibility to liaise with the appropriate authorities in order to gain the necessary permissions for the practical tasks to be conducted. It is expected that these may need to be conducted under the supervision of someone appropriately authorised under the particular Asset Owner's Safety Rules.

# 16.0 Employer/Local/Context Specific Requirements

Although the assessment processes and procedures required to monitor, measure and record Gas Network Craftsperson competencies are broadly similar, it is important to note that some operating procedures and associated systems may vary by asset owner, as well as site specific conditions. It is the responsibility of the employer / the technical expert to make the Independent Assessor aware to ensure processes and procedures applied maintain equity and parity for all apprentices during the EPA. Where there are areas of concern or uncertainty, it is the responsibility of the employer to record these instances and draw them to the attention of the EUIAS.

# 17.0 Planning for EPA

Where assessment is taking place in a real work environment and where the Technical Experts are not from the employer whose site is being used for the assessment the Technical Experts are required to plan assessments appropriately and ensure that they have the required authorisations and documentation in place.

Prior to on-site assessment taking place the Technical Expert needs to make arrangements with the Asset Owner and need to have seen and understood the risk assessment, method statement and work instruction applicable to that asset owner or site. If applicable the Technical Expert will need to contact the company and person responsible for the person/team, work area and gain the appropriate safety documentation.

The Technical Expert may also require plans of the site, the designated work area (DWA), knowledge of other services in the area and any other documentation related to the specific work-package being followed and the activity and associated competences being assessed.

# 18.0 Recording and Reporting

Employers, technical experts, independent assessor and IQA as appropriate, must maintain detailed records of the end point assessment processes and procedures. This documentation must include:

- At apprentice level - detailed records for each apprentice, for each assessable element of the programme including practical tasks, logbooks and end-point assessment documentation
- Assessor level – detailed records for each apprentice assessed including on programme and end-point assessments together with feedback and resulting action points for where re-assessments may be necessary
- IQA level – detailed records for each technical expert including individual reviews, referrals relating to their performance requiring corrective action, standardisation across and between assessors and, where necessary because of multiple sites, standardisation across and between sites. Particular attention will be paid to how new and inconsistent technical experts are monitored and supported including corrective/remedial action
- Provider / Employer level – detailed, cumulative records of each cohort of apprentices including evidence of their on-programme performance and end-point assessment recommendations. Where an apprentice has sought and been provided with specific support permission must be sought immediately for this

from the EUIAS and a record of any decision and actions taken maintained by the provider.

# 19.0 Audit and Quality Assurance

Quality assurance for all Gas apprenticeship programmes is provided through the established EUIAS Audit & Quality Assurance processes and procedures and determined by the Gas Assurance Panel. The aim of the EUIAS' assessment and assurance process is to guarantee the credibility, integrity and validity of the EPA and ensure that decisions on competence and grading for the Level 3 Gas Network Craftsperson are consistent across different audiences and constituencies, contexts and settings as well as different geographies and providers.

The EUIAS assurance process is multi-faceted and consists of observation of assessment taking place in the working environment, in the Test Centres as well as the supporting systems, processes and assessment records. Dependent upon locations, and the number of active assessors employed by a provider, the process may take place over multiple days.

## 19.1 Internal Quality Assurance – EUIAS

The EUIAS will evaluate and assure fairness and consistency in the assessment process. It will ensure assessment tools and supporting materials used for the EPA follow best assessment practice. It will provide training and guidance for independent assessors and technical experts in terms of good assessment practice, use of assessment tools and grading it will also implement and maintain internal quality assurance systems and procedures that support fair, reliable, valid and consistent assessment across the organisation and over time. There will be representative sampling of apprentice assessment work from all components of the EPA. They will also facilitate bi-annual standardisation events that enable independent assessors and technical experts to attend a minimum of one event per year.

20% of all independent assessors' decisions will be subject to moderation by the EUIAS.

# 20. Ensuring Independence

The EUIAS is employer-owned and governed with each of the four key sectors involved; it includes professional engineering bodies (PEIs) as well as broader industry and other stakeholder representation. In practical terms the assessment and quality assurance of the Gas Network Craftsperson is overseen by a Gas Assurance Panel (GAP) which is comprised by experts from the sector who are directly involved in developing human resources for their

sector including training and assessment. The GAP and the technical experts that it deploys on behalf of the EUIAS will assure the reliability, rigour and robustness of employer assessment and quality assurance practices and will ensure comparability and consistency across employers in their judgements of competence in the context of the Gas Network Craftsperson Apprenticeship.

## 21. Subject Expert Requirements

The subject matter experts used by EUIAS to undertake the peer review process are all nominated employees of the gas network forum. They all hold appropriate experience in training, assessment, examination or standardisation and possess a current working knowledge of the role of the Gas Network Craftsperson.

## 22. Professional Body Registration

Although the apprentice has met the EngTech criteria and has satisfied the PEI membership requirements, the apprentice is under no obligation to submit any evidence to the PEI to seek the EngTech award or PEI registration at this time.

## 23. Confirmation & Notification

Once the preliminary results and recommendations have been moderated the EUIAS will confirm the results to the employer and provider within 30 working days. The employer and/or provider will be expected to inform the apprentices of their outcomes.

## 24. Certification

The EUIAS will issue certificates within 10 working days of receipt from the IFA to the employer who will be expected to pass on to the apprentices. Duplicate certificates can be issued on request to the EUIAS where a standard fee will be payable.

## 25. Appeals

The EUIAS requires all providers to have a complaints and appeals procedure in place that enables an apprentice who believes that the assessment of their competence has not been conducted in an equitable and fair manner or where any failure to follow published assessment procedures effectively and efficiently has occurred. Where there is a challenge to the final grade awarded the challenge must be lodged in writing with the EUIAS within ten working days and the EUIAS appeals procedure will be followed.

# 26. Administration

All individuals involved with the Gas Network Craftsperson apprenticeship programme must be registered with the EUIAS. This will include apprentices, technical experts, independent assessors invigilators and markers. Applications for registration should be addressed to enquiries@euias.co.uk

**Organisations we work with include:**


## Find out more

To find out how the Energy Utilities Independent Assessment Service can support end-point assessment of your apprentices, visit **www.euias.co.uk**,
Or contact us on **enquires@euias.co.uk**