

**GAS UTILISATION SECTOR SPECIFIC REQUIREMENTS ADDITIONAL TO
THE INFORMATION AND GUIDANCE CONTAINED IN THE
FINAL GENERIC ASSESSMENT STRATEGY (v8.4 April 2012)**

Appendix F

These are the current requirements for accredited vocational qualifications. They will remain in place until the certification end dates. Any requirements for new vocational qualifications will be discussed by EU Skills and the industry and agreed with the awarding body(ies) when the new qualifications are developed.

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INTRODUCTION

This Assessment Strategy has been produced by Energy & Utility Skills (EU Skills), the Sector Skills Council (SSC) for the gas, power, waste management and water industries, who developed the National Occupational Standards underpinning these qualifications and units. The content of the Assessment Strategy has been developed and agreed through collaboration with Awarding Organisations/Awarding Bodies, Summit Skills and Gas Safe Register.

These qualifications are unique in that they contain assessment units taken from the plumbing and electrical qualification structures, developed by Summit Skills for the building services industry. Summit Skills will reciprocate this arrangement and incorporate into their plumbing qualifications, assessment units from the gas qualification structures developed by EU Skills for the gas utilisation industry. The rationale for this sharing of qualification units is that this will ensure consistency between the building services and gas sector qualifications. Candidates who commence their qualifications from either a gas or plumbing and heating direction will be assessed against the same gas and water systems criteria.

Each Diploma within the suite is designed to incorporate the specific requirements and any differences resulting from connection and appliance usage on both Natural Gas and Liquefied Petroleum Gas (LPG). A learner achieving a Diploma from this suite will have the appropriate skills, knowledge and understanding to enable them to work safely across this range.

Achievement of the gas qualifications covered by this document will facilitate Gas Safe Registration in the categories appropriate to the specific qualification achieved **provided that** (1) the Awarding Organisation/Awarding Body has a formal documented agreement with Gas Safe Register and (2) that the qualification is delivered fully in line with the requirements set out in this assessment strategy document.

Information about the Gas Safe Registration categories each qualification aligns to may be found in the section on qualification combinations.

This assessment strategy appendix F is to be used in conjunction with the Energy & Utility Skills Final Generic Assessment Strategy (v 8.4 April 2012) consisting of the core requirements, common across all of EU Skills' footprints.

THE DIRECTORY OF QUALIFICATIONS IN GAS UTILISATION

There are a number of QCF Level 3 and SCQF level 6 Diplomas available, these are:

- EUSGU001 Diploma in Gas Utilisation: Core Skills and Knowledge (QCF level 3)
- EUSGU002 Diploma in Gas Utilisation Metering (2.5-16cu/m) (QCF level 3)
- [EUSGU003 Diploma in Gas Utilisation Metering \(2.5-1076cu/m\) *](#)
- [EUSGU004 Diploma in Gas Utilisation Metering \(above 1076cu/m\) *](#)
- EUSGU005 Diploma in Gas Utilisation Installation & Maintenance: Cookers, Tumble Dryers and Leisure (QCF level 3; SCQF level 6)
- EUSGU006 Diploma in Gas Utilisation Installation & Maintenance: Domestic Space Heating (QCF level 3; SCQF level 6)
- EUSGU007 Diploma in Gas Utilisation Installation & Maintenance: Domestic Warm Air (QCF level 3; SCQF level 6)
- EUSGU008 Diploma in Gas Utilisation Installation: Water Heating and Wet Central Heating (QCF level 3; SCQF level 6)
- EUSGU009 Diploma in Gas Utilisation Maintenance: Water Heating and Wet Central Heating (QCF level 3; SCQF level 6)
- EUSGU010 Diploma in Gas Utilisation Installation & Maintenance: Water Heating and Wet Central Heating (QCF level 3; SCQF level 6)
- EUSGU011 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure and Domestic Space Heating (QCF level 3; SCQF level 6)
- EUSGU012 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure and Domestic Space Heating (QCF level 3; SCQF level 6)
- EUSGU013 Diploma in Gas Utilisation Installation & Maintenance: Cookers, Tumble Dryers, Leisure and Domestic Space Heating (QCF level 3; SCQF level 6)
- EUSGU014 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating (QCF level 3; SCQF level 6)
- EUSGU015 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating (QCF level 3; SCQF level 6)
- EUSGU016 Diploma in Gas Utilisation Installation & Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating (QCF level 3; SCQF level 6)
- EUSGU017 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air (QCF level 3; SCQF level 6)
- EUSGU018 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air (QCF level 3; SCQF level 6)
- EUSGU019 Diploma in Gas Utilisation Installation & Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air (QCF level 3; SCQF level 6)
- EUSGU020 Diploma for Gas Emergency First Call Operative (QCF level 3; SCQF level 6)
- EUSGU023 Natural Gas Smart Metering (QCF level 3; SCQF level 6)
- EUSGU024 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Limited Wet Central Heating and Domestic Warm Air (QCF level 3; SCQF level 6)
- EUSGU025 Diploma in Gas Utilisation (QCF Level 3; SCQF level 6)

The above suite of qualifications sits within the Gas Industry Framework. In addition to these there are a number of Plumbing and Heating qualifications that incorporate gas requirements and these are:-

- Level 3 NVQ Diploma in Plumbing and Heating (EUSGU021)**
- Level 3 NVQ Diploma in Domestic Heating (EUSGU021)**
- Level 3 NVQ Diploma in Plumbing and Heating (EUSGU022)**
- Level 3 NVQ Diploma in Domestic Heating (EUSGU022)**

EUSGU21 identifies a learner who has completed the gas warm air installation and maintenance option within the plumbing and heating or domestic heating full qualification

EUSGU22 identifies a learner who has completed the gas wet central heating installation and maintenance option within the plumbing and heating or domestic heating full qualification

** Level 2 NVQ Diplomas in Plumbing and Heating OR Domestic Heating are pre-requisite qualifications for these routes

These four qualifications sit under the Summit Skills Building Services Framework.

Other units may be added to these qualifications, subject to the completion of the required core skills and knowledge units pertinent to the additional units selected.

* [These Qualifications to be developed subject to demand](#)

THE STRUCTURE OF QUALIFICATIONS IN GAS UTILISATION (Unit Combinations and Gas Registration Categories)

EUSGU 001 Diploma in Gas Utilisation: Core Skills and Knowledge (QCF Level 3; SCQF Level 6)

This is a knowledge only qualification designed to provide underpinning knowledge for the gas industry.

All units below are Mandatory and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
Completion of this Qualification Combination does not enable Gas Registration unless combined with one (or more) of the other available combinations listed in this Appendix	

Total number of units required = 5

EUSGU 002 Diploma in Gas Utilisation Metering 2.5 – 16cu/m (QCF Level 3; SCQF Level 6)

All units below are Mandatory and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.1	Specific Core Metering
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.12	Install Gas Meters and Regulators (2.5 – 16.0 m ³ /hr)
Completion of this Qualification Combination will enable Gas Registration in the following categories: CMA 1, CoNGLP 1PD, MET 1/ 2, MET4, REGT 1	

Total number of units required = 9

EUSGU 005 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers and Leisure (QCF Level 3; SCQF Level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.1	Install Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
<p>Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, CPA 1, MET1/2, CoNGLP1 PD</p>	

Total number of units required = 10

EUSGU 006 Diploma in Gas Utilisation Installation and Maintenance: Domestic Space Heating (QCF Level 3; SCQF Level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.7	Install Domestic Gas Space Heating Appliances
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
<p>Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, HTR 1, CPA 1, MET1/2, CoNGLP1 PD</p>	

Total number of units required = 10

EUSGU 007 Diploma in Gas Utilisation Installation and Maintenance: Domestic Warm Air (QCF Level 3; SCQF Level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.10	Install Domestic Gas Warm Air Central Heating Systems
DSG 3.11	Maintain Gas Warm Air Central Heating Systems and Appliances
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, DAH 1, CPA 1, MET1/2, CoNGLP1 PD	

Total number of units required = 11

EUSGU 008 Diploma in Gas Utilisation Installation: Water Heating and Wet Central Heating (QCF Level 3; SCQF Level 6)

All units below are Mandatory and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and Apply domestic cold water system installation and maintenance techniques
DMES 03	Understand and Apply Domestic Hot Water System Installation and Maintenance Techniques
DMES 04	Understand and Apply Domestic Central Heating System Installation and Maintenance Techniques
DMES 05	Understand and Apply Domestic Cold Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 06	Understand and Apply Domestic Hot Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 07	Understand and Apply Domestic Central Heating System Installation, Commissioning, Service and Maintenance Techniques
DTHG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, Commission, Service and Maintain Domestic Heating Systems
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CENWAT 1, CPA 1, MET1/2, CoNGLP1 PD	

Total number of units required = 19

EUSGU 009 Diploma in Gas Utilisation Maintenance: Water Heating and Wet Central Heating (QCF Level 3; SCQF Level 6)

All units below are Mandatory and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and Apply Domestic Cold Water System Installation and Maintenance Techniques
DMES 03	Understand and Apply Domestic Hot Water System Installation and Maintenance Techniques
DMES 04	Understand and Apply Domestic Central Heating System Installation and Maintenance Techniques
DMES 05	Understand and Apply Domestic Cold Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 06	Understand and Apply Domestic Hot Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 07	Understand and Apply Domestic Central Heating System Installation, Commissioning, Service and Maintenance Techniques
DHTG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, Commission, Service and Maintain Domestic Heating Systems
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CENWAT 1, CPA 1, MET1/2, CoNGLP1 PD	

Total number of units required = 19

EUSGU 010 Diploma in Gas Utilisation Installation and Maintenance: Water Heating and Wet Central Heating (QCF Level 3; SCQF Level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and Apply Domestic Cold Water System Installation and Maintenance Techniques
DMES 03	Understand and Apply Domestic Hot Water System Installation and Maintenance Techniques
DMES 04	Understand and Apply Domestic Central Heating System Installation and Maintenance Techniques
DMES 05	Understand and Apply Domestic Cold Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 06	Understand and Apply Domestic Hot Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 07	Understand and Apply Domestic Central Heating System Installation, Commissioning, Service and Maintenance Techniques
DTHG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, Commission, Service and Maintain Domestic Heating Systems
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CENWAT 1, CPA 1, MET1/2, CoNGLP1 PD	

Total number of units required = 20

EUSGU 011 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure and Domestic Space Heating (QCF Level 3; SCQF Level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.1	Install Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.7	Install Domestic Gas Space Heating Appliances
<p>Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CPA 1, MET1/2, CoNGLP1 PD</p>	

Total number of units required = 10

EUSGU 012 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure and Domestic Space Heating (QCF Level 3; SCQF Level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
<p>Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CPA 1, MET1/2, CoNGLP1 PD</p>	

Total number of units required = 10

EUSGU 013 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers, Leisure and Domestic Space Heating (QCF Level 3; SCQF Level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.1	Install Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.7	Install Domestic Gas Space Heating Appliances
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
<p>Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CPA 1, MET1/2, CoNGLP1 PD</p>	

Total number of units required = 12

EUSGU 014 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating (QCF Level 3; SCQF Level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.1	Install Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.7	Install Domestic Gas Space Heating Appliances
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and Apply Domestic Cold Water System Installation and Maintenance Techniques
DMES 03	Understand and Apply Domestic Hot Water System Installation and Maintenance Techniques
DMES 04	Understand and Apply Domestic Central Heating System Installation and Maintenance Techniques
DMES 05	Understand and Apply Domestic Cold Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 06	Understand and Apply Domestic Hot Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 07	Understand and Apply Domestic Central Heating System Installation, Commissioning, Service and Maintenance Techniques
DTHG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, Commission, Service and Maintain Domestic Heating Systems

MES 02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating Systems
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**Completion of this Qualification Combination will enable Gas Registration in the following categories:
CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, CPA 1, MET1/2, CoNGLP1 PD**

Total number of units required = 21

EUSGU 015 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating (QCF Level 3; SCQF Level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and Apply Domestic Cold Water System Installation and Maintenance Techniques
DMES 03	Understand and Apply Domestic Hot Water System Installation and Maintenance Techniques
DMES 04	Understand and Apply Domestic Central Heating System Installation and Maintenance Techniques
DMES 05	Understand and Apply Domestic Cold Water System Installation, Commissioning, Service and Maintenance techniques
DMES 06	Understand and Apply Domestic Hot Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 07	Understand and Apply Domestic Central Heating System Installation, Commissioning, Service and Maintenance Techniques
DTHG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, Commission, Service and Maintain Domestic Heating Systems

Unit number	Unit title
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, CPA MET1/2, CoNGLP1 PD	

Total number of units required = 21

EUSGU 016 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating (QCF Level 3; SCQF Level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.1	Install Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.7	Install Domestic Gas Space Heating Appliances
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and Apply Domestic Cold Water System Installation and Maintenance Techniques
DMES 03	Understand and Apply Domestic Hot Water System Installation and Maintenance Techniques
DMES 04	Understand and Apply Domestic Central Heating System Installation and Maintenance Techniques
DMES 05	Understand and Apply Domestic Cold Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 06	Understand and Apply Domestic Hot Water System Installation, Commissioning, Service and Maintenance Techniques

Unit number	Unit title
DMES 07	Understand and Apply Domestic Central Heating System Installation, Commissioning, Service and Maintenance Techniques
DTHG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, Commission, Service and Maintain Domestic Heating Systems
MES 02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating Systems
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, CPA 1, MET1/2, CoNGLP1 PD	

Total number of units required = 24

EUSGU 017 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air (QCF Level 3; SCQF Level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.1	Install Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.7	Install Domestic Gas Space Heating Appliances
DSG 3.10	Install Domestic Gas Warm Air Central Heating Systems and Appliances
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and Apply Domestic Cold Water System Installation and Maintenance Techniques
DMES 03	Understand and Apply Domestic Hot Water System Installation and Maintenance Techniques
DMES 04	Understand and Apply Domestic Central Heating System Installation and Maintenance Techniques
DMES 05	Understand and Apply Domestic Cold Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 06	Understand and Apply Domestic Hot Water System Installation, Commissioning, Service and Maintenance techniques
DMES 07	Understand and Apply Domestic Central Heating System Installation, Commissioning, Service and Maintenance Techniques
DTHG 02	Install and Maintain Domestic Heating Systems

DHTG 04	Install, Commission, Service and Maintain Domestic Heating Systems
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, DAH 1, CPA 1, MET1/2, CoNGLP1 PD	

Total number of units required = 22

EUSGU 018 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Wet Central Heating and Domestic Warm Air (QCF Level 3; SCQF Level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
DSG 3.11	Maintain Gas Warm Air Central Heating Systems and Appliances
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and Apply Domestic Cold Water System Installation and Maintenance Techniques
DMES 03	Understand and Apply Domestic Hot Water System Installation and Maintenance Techniques
DMES 04	Understand and Apply Domestic Central Heating System Installation and Maintenance Techniques
DMES 05	Understand and Apply Domestic Cold Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 06	Understand and Apply Domestic Hot Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 07	Understand and Apply Domestic Central Heating System Installation, Commissioning, Service and Maintenance Techniques
DTHG 02	Install and Maintain Domestic Heating Systems

Unit number	Unit title
DHTG 04	Install, Commission, Service and Maintain Domestic Heating Systems
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, DAH 1, CPA 1, MET1/2, CoNGLP1 PD	

Total number of units required = 22

EUSGU 019 Diploma in Gas Utilisation Installation and Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating and Wet Central Heating and Domestic Warm Air (QCF Level 3; SCQF Level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.1	Install Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.7	Install Domestic Gas Space Heating Appliances
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
DSG 3.10	Install Domestic Gas Warm Air Central Heating Systems and Appliances
DSG 3.11	Maintain Gas Warm Air Central Heating Systems and Appliances
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and Apply Domestic Cold Water System Installation and Maintenance Techniques
DMES 03	Understand and Apply Domestic Hot Water System Installation and Maintenance Techniques
DMES 04	Understand and Apply Domestic Central Heating System Installation and Maintenance Techniques

Unit number	Unit title
DMES 05	Understand and Apply Domestic Cold Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 06	Understand and Apply Domestic Hot Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 07	Understand and Apply Domestic Central Heating System Installation, Commissioning, Service and Maintenance Techniques
DTHG 02	Install and Maintain Domestic Heating Systems
DHTG 04	Install, Commission, Service and Maintain Domestic Heating Systems
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, DAH 1, CPA 1, MET1/2, CoNGLP1 PD	

Total number of units required = 26

EUSGU 020 Diploma for Gas Emergency First Call Operative (QCF Level 3; SCQF Level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.1	Specific Core Metering
DSG 2.2	Specific Core Emergency
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.12	Install Gas Meters and Regulators (2.5 to 16.0m ³ /hr)
DSG 3.13	Install Gas Meters and Regulators (2.5 to 1076m ³ /hr)
DSG 3.15	Dealing with Reported Upstream Gas Emergencies
DSG 3.16	Dealing with Reported Downstream Gas Emergencies
DSG 3.17	Strength Testing, Gas Tightness Testing and Direct Purging – IGE/UP/1A
Completion of this Qualification Combination will enable Gas Registration in the following categories: CESP 1, MET 1, MET4, CMET1, TCP1A, REGT1, CoNGLP1 PD	

Total number of units required = 14

- **Level 3 NVQ Diploma in Plumbing and Heating (EUSGU021)****

The gas units listed below are only available if:

- a) the learner already holds the plumbing and heating units listed in the table, at level 3 OR
- b) the learner is undertaking the plumbing and heating units as part of this qualification

** Level 2 NVQ Diploma in Plumbing and Heating is a pre-requisite qualification for this route

Please note: In Scotland it may not be possible for learners undertaking the SVQ level 3 in Plumbing to achieve the additional gas units listed below (for further information regarding plumbing qualifications in Scotland please contact Summit Skills).

All units below are Mandatory and must be completed:

Unit number	Unit title
BSE05	Understand how to organise Resources within BSE
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating Systems and Components.
DMES05	Understand and Apply Domestic Cold Water System Installation, Commissioning, Service and Maintenance Techniques
DMES06	Understand and apply Domestic Hot Water System Installation, Commissioning, Service and Maintenance Techniques
DMES07	Understand and Apply Domestic Central Heating System Installation, Commissioning, Service and Maintenance Techniques
PLG06	Understand and Apply Domestic Sanitation System Installation, Commissioning, Service and Maintenance Techniques
PLG07	Install, Commission, Service and Maintain Domestic Plumbing and Heating Systems
DNG01	Understand Core Gas Safety Principles for Natural Gas within Domestic Building Services Engineering
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.10	Install Domestic Gas Warm Air Central Heating Appliances
DSG 3.11	Maintain Gas Warm Air Central Heating Systems and Appliances

Unit number	Unit title
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, DAH 1, CPA 1, MET1/2, CoNGLP1 PD	

Total number of units required = 13

- **Level 3 NVQ Diploma in Domestic Heating (EUSGU021)****

The gas units listed below are only available if:

- a) the learner already holds the plumbing and heating units listed in the table, at level 3 OR
- b) the learner is undertaking the plumbing and heating units as part of this qualification

** Level 2 NVQ Diploma in Domestic Heating or Plumbing and Heating is a pre-requisite qualification for this route

Please note: In Scotland it may not be possible for learners undertaking the SVQ level 3 in Plumbing to achieve the additional gas units listed below (for further information regarding plumbing qualifications in Scotland please contact Summit Skills).

All units below are Mandatory and must be completed:

Unit number	Unit title
BSE05	Understand how to organise Resources within BSE
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating Systems and Components.
DMES05	Understand and Apply Domestic Cold Water System Installation, Commissioning, Service and Maintenance Techniques
DMES06	Understand and Apply Domestic Hot Water System Installation, Commissioning, Service and Maintenance techniques
DMES07	Understand and Apply Domestic Central Heating System Installation, Commissioning, Service and Maintenance Techniques
DHTG04	Install, Commission, Service and Maintain Domestic Heating Systems
DNG01	Understand Core Gas Safety Principles for Natural Gas within Domestic Building Services Engineering
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.10	Install Domestic Gas Warm Air Central Heating Appliances

Unit number	Unit title
DSG 3.11	Maintain Gas Warm Air Central Heating Systems and Appliances
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, DAH 1, CPA 1, MET1/2, CoNGLP1 PD	

Total number of units required = 12

- Level 3 NVQ Diploma in Plumbing and Heating (EUSGU022)**

The gas units listed below are only available if:

- the learner already holds the plumbing and heating units listed in the table, at level 3 OR
- the learner is undertaking the plumbing and heating units as part of this qualification

** Level 2 NVQ Diploma in Plumbing and Heating is a pre-requisite qualification for this route

Please note: In Scotland it may not be possible for learners undertaking the SVQ level 3 in Plumbing to achieve the additional gas units listed below (for further information regarding plumbing qualifications in Scotland please contact Summit Skills).

All units below are **Mandatory** and must be completed:

Unit number	Unit title
BSE05	Understand how to organise Resources within BSE
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating Systems and Components.
DMES05	Understand and Apply Domestic Cold Water System Installation, Commissioning, Service and Maintenance Techniques
DMES06	Understand and Apply Domestic Hot Water System Installation, Commissioning, Service and Maintenance Techniques
DMES07	Understand and Apply Domestic Central Heating System Installation, Commissioning, Service and Maintenance Techniques
PLG06	Understand and Apply Domestic Sanitation System Installation, Commissioning, Service and Maintenance Techniques
PLG07	Install, Commission, Service and Maintain Domestic Plumbing and Heating Systems
DNG01	Understand Core Gas Safety Principles for Natural Gas within Domestic Building Services Engineering
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances

Unit number	Unit title
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CENWAT 1, CPA 1, MET1/2, CoNGLP1 PD	

Total number of units required = 12

- **Level 3 NVQ Diploma in Domestic Heating (EUSGU022)****

The gas units listed below are only available if:

- a) the learner already holds the plumbing and heating units listed in the table, at level 3 OR
- b) the learner is undertaking the plumbing and heating units as part of this qualification

** Level 2 NVQ Diploma in Domestic Heating or Plumbing and Heating are a pre-requisite qualification for this route

Please note: In Scotland it may not be possible for learners undertaking the SVQ level 3 in Plumbing to achieve the additional gas units listed below (for further information regarding plumbing qualifications in Scotland please contact Summit Skills).

All units below are Mandatory and must be completed:

Unit number	Unit title
BSE05	Understand how to organise Resources within BSE
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating Systems and Components.
DMES05	Understand and Apply Domestic Cold Water System Installation, Commissioning, Service and Maintenance Techniques
DMES06	Understand and Apply Domestic Hot Water System Installation, Commissioning, Service and Maintenance Techniques
DMES07	Understand and Apply Domestic Central Heating System Installation, Commissioning, Service and Maintenance Techniques
DHTG 04	Install, Commission, Service and Maintain Domestic Heating Systems
DNG01	Understand Core Gas Safety Principles for Natural Gas within Domestic Building Services Engineering
DSG 2.3	Specific Core Installation and Maintenance

Unit number	Unit title
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CENWAT 1, CPA 1, MET1/2, CoNGLP1 PD	

Total number of units required = 12

EUSGU 023

Diploma in Gas Smart Metering 2.5 – 6 m³/hr (QCF Level 2, SCQF level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
GSM 1.0	Applied Practices and Principles for Installing Low Pressure Natural Gas Smart Meters up to U6 only
GSM 2.0	Prepare, Install and Commission Low Pressure Natural Gas Smart Meters and Regulators up to 6.0m ³ /hr
GSM 3.0	Low Pressure Gas Smart Meter Tightness Testing and Direct Purging
Completion of this Qualification Combination will enable Gas Safe Registration in the following categories only: CMA 1, MET 1/2,	

Total number of units required = 3 (see note below)

EUSGU 023 + GSM 4.0

Diploma in Gas Smart Metering 2.5 – 6 m³/hr (QCF Level 2, SCQF level 6) (including medium pressure elective unit GSM 4.0)

Unit number	Unit title
GSM 1.0	Applied Practices and Principles for Installing Low Pressure Natural Gas Smart Meters up to U6 only
GSM 2.0	Prepare, Install and Commission Low Pressure Natural Gas Smart Meters and Regulators up to 6.0m ³ /hr
GSM 3.0	Low Pressure Gas Smart Meter Tightness Testing and Direct Purging

Unit number	Unit title
GSM 4.0	Prepare, Install and Commission Medium Pressure Natural Gas Smart Meter and Regulator up to 6.0m ³ /hr
Completion of this Qualification Combination will enable Gas Safe Registration in the following categories only: CMA 1, MET 1/2, REGT1	

Total number of units required = 4 (see note below)

Important Note regarding the Smart Metering Qualification Options

The EUSGU 023 Diploma also requires the completion of other generic units that cover the general safe working practices, and the technical communication devices used in Smart Metering and Customer Service aspects. There are also Power industry units available for Learners who need to be competent for dual fuel working. These additional units are not included in this section of the Assessment Strategy document as it deals only with the gas requirements. For information on the assessment requirements for the other units, please refer to the generic EU Skills Assessment Strategy document.

EUSGU 024 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water Heating, Limited Wet Central Heating and Domestic Warm Air (QCF Level 3; SCQF Level 6)

All units below are **Mandatory** and must be completed:

Unit number	Unit title
DSG 1.1	Understanding Health and Safety in Gas Utilisation
DSG 1.2	Understanding Scientific Principles in Gas Utilisation
DSG 1.3	Understanding Combustion and Properties of Gas
DSG 1.4	Understanding Buildings, Services and Structures
DSG 1.5	Understanding Gas Safety
DSG 2.3	Specific Core Installation and Maintenance
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.5	Install, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Domestic and Small Commercial Premises
DSG 3.6	Tightness Test, Purge, Commission and De-commission Gas Pipework up to 35mm (1 ¼) Diameter in Small Natural Gas Installations
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
DSG 3.11	Maintain Gas Warm Air Central Heating Systems and Appliances
DSG 3.21	Water Compulsory Core Unit
DMES 02	Understand and Apply Domestic Cold Water System Installation and Maintenance Techniques
DMES 03	Understand and Apply Domestic Hot Water System Installation and Maintenance Techniques
DMES 04	Understand and Apply Domestic Central Heating System Installation and Maintenance Techniques
DMES 05	Understand and Apply Domestic Cold Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 06	Understand and Apply Domestic Hot Water System Installation, Commissioning, Service and Maintenance Techniques
DMES 07	Understand and Apply Domestic Central Heating System Installation, Commissioning, Service and Maintenance Techniques
MES02	Understand and Carry Out Electrical Work on Domestic Plumbing and Heating systems

Unit number	Unit title
Completion of this Qualification Combination will enable Gas Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, DAH 1, CPA 1, MET1/2, CoNGLP1 PD	

Total number of units required = 20

EUSGU025 Diploma in Gas Utilisation (QCF Level 3; SCQF level 6)

Pathways

- EUSGU025(a) Diploma in Gas Utilisation: Technical Installation Engineer
- EUSGU025(b) Diploma in Gas Utilisation: Technical Maintenance Engineer
- EUSGU025(c) Diploma in Gas Utilisation: Technical Installation & Maintenance Engineer

The units below are **Mandatory** and must be completed:

Unit number	Unit title
GHE 01	Delivery of effective customer service
DSG 1.1	Understanding health and safety in gas utilisation
DSG 1.2	Understanding scientific principles in gas utilisation
DSG 1.3	Understanding combustion and properties of gas
DSG 1.4	Understanding buildings, services and structures
DSG 1.5	Understanding gas safety
DSG 2.3	Specific core installation and maintenance
DSG 3.5	Install, commission and de-commission gas pipework up to 35mm (1 ¼) diameter in domestic and small commercial premises
DSG 3.6	Tightness test, purge, commission and de-commission gas pipework up to 35mm (1 ¼) diameter in small natural gas installations
DSG 3.21	Water compulsory core unit
GHE 02	Understand the principles and operation of the Green Deal
GHE 03	Understand the use of Energy Efficiency measures on different buildings
GHE 04	Understand insulation and building treatment methods
GHE 05	Understand air quality and ventilation requirements for buildings
GHE 06	Water Supply 'Water Fittings' Regulations and Water Byelaws in the UK
GHE 07	The installation, commissioning and safety aspects of hot water systems for domestic use in accordance with UK building regulations

Learners must also take the following specific mandatory units within their chosen pathway-;

EUSGU025(a) Diploma in Gas Utilisation: Technical Installation Engineer

Unit number	Unit title
DSG 3.3	Install domestic gas water heaters and wet central heating appliances
<p>Completion of this Qualification Combination will enable Gas Safe Registration in the following categories: CCN 1, CENWAT 1, CPA 1, MET1/2, CoNGLP1 PD</p>	

Total number of units required = 17

EUSGU025(b) Diploma in Gas Utilisation: Technical Maintenance Engineer

Unit number	Unit title
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
DSG 3.11	Maintain Gas Warm Air Central Heating Systems and Appliances
<p>Completion of this Qualification Combination will enable Gas Safe Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, DAH 1, CPA 1, MET1/2, CoNGLP1 PD</p>	

Total number of units required = 20

EUSGU025(c) Diploma in Gas Utilisation: Technical Installation & Maintenance Engineer

Unit number	Unit title
DSG 3.2	Maintain Domestic Gas Cookers, Tumble Dryers and Leisure Appliances
DSG 3.3	Install Domestic Gas Water Heaters and Wet Central Heating Appliances
DSG 3.4	Maintain Gas Water Heating and Wet Central Heating Appliances
DSG 3.8	Maintain Domestic Gas Space Heating Appliances
DSG 3.11	Maintain Gas Warm Air Central Heating Systems and Appliances
<p>Completion of this Qualification Combination will enable Gas Safe Registration in the following categories: CCN 1, CKR 1, LAU 1, LEI 1, HTR 1, CENWAT 1, DAH 1, CPA 1, MET1/2, CoNGLP1 PD</p>	

Total number of units required = 21

ASSESSMENT STRATEGY FOR QUALIFICATIONS IN GAS UTILISATION

REQUIREMENTS FOR SCHEME STAFF

ASSESSORS

General

The centre MUST nominate all Assessors to the Awarding Organisation for approval prior to them conducting any assessments. Assessors may be employed by the Centre (Centre Based Assessors) or be work based (Workplace Assessors) who may or may not be from the same organisation as the Learners.

Assessors MUST be vocationally and occupationally competent in the areas they are assessing and have a thorough knowledge of the qualification units being assessed.

In addition to the qualifications listed below, the Assessor must be able to provide appropriate documented evidence that demonstrates they have a minimum of 5 years proven occupational experience in the activities they will be assessing. Particular attention should be paid to providing evidence of occupational experience in the gas safety critical areas being assessed.

Where Assessors undertake assessments in the workplace, and are not supported by a suitable gas operative, then they or their employer must be a member of an appropriate Gas Registration Body in accordance with the Gas Safety (Installation and Use) Regulations. In these circumstances they should also hold suitable insurance for this activity.

Assessor Qualifications

Assessors must be technically qualified in domestic gas installation / maintenance and hold one of the following qualifications (**see note below for special arrangements for Gas Smart Metering**):

- C&G / SQA - S/NVQ in Domestic Natural Gas (Level 3);
or
- C&G - 662 Certificate for Service Engineers (Gas);
or
- C&G - 598-2 Certificate in Gas Installation Studies;
or
- C&G - 660 Certificate in Gas Fitting - Final

This list is not considered exhaustive and other 'Mechanical Engineering Services' (MES) or 'Building Engineering Services' (BES) qualifications at Level 3/SCQF Level 6 or equivalent may be considered acceptable. Centres must submit requests to confirm the acceptability of other qualifications to their External Verifier/Qualification Consultant (EV/QC) for a decision regarding the acceptability of other qualifications. The EV/QC must keep a record of any such decisions.

In addition to the above qualifications, all Assessors must hold a current certificate of gas safety competence in the areas of gas work they will be assessing that is not more than 5 years old (**either current ACS Certificates of Gas Safety Competence or a 6012/S/NVQ are acceptable**).

'Centre Based Assessors' MUST hold:

- QCF Level Three Award "Assessing Vocationally Related Achievement"
or
- QCF Level Three Certificate "Assessing Vocationally Related Achievement"
or
- A1* or D32 /D33 with an Upgrade to A1 as a minimum
or
- SQA Accredited Learning and Development Unit L&D 9DI – Assess workplace competence using direct and indirect methods (replaces Units A1)*

'Workplace Assessors' MUST hold

- QCF Level Three Award "Assessing Competence in the Work Environment"
or
- QCF Level Three Certificate "Assessing Vocationally Related Achievement"
or
- SQA Accredited Learning and Development Unit L&D 9D Assess workplace competence using direct methods
or
- A2 or D32 with an upgrade to A2 as a minimum *

* The Teaching Qualification for Secondary Education (TQSE) or the Teaching Qualification for Further Education (TQFE) (which is recognised in Scotland) these awards are acceptable providing they are the versions that are recognised as equivalents to the A1 award plus appropriate CPD.

Assessors holding D units must have evidence of Continuing Professional Development (CPD) to demonstrate compliance with the A units.

A qualified Assessor shall supervise 'Candidate Assessors' who are working towards their Assessor qualifications. They should have a clear action plan for achieving the Assessor qualification(s).

Assessor approval will be withdrawn if the qualification / units have not been attained within 18 months. Evidence of CPD will be sought by the EV/QC for all Assessors approved to assess for the centre.

Note:

Special arrangements for assessments carried out in EUSGU023: Diploma in Gas Smart Metering 2.5 - 6m³/hr (QCF Level 2; SCQF Level 6) only

While holding one of the previously listed industry qualifications is not a mandatory requirement in this case, Assessors must be technically qualified in domestic gas installation / maintenance and hold a current certificate of gas safety competence that includes Gas Metering and is not more than 5 years old (**either current ACS Certificates of Gas Safety Competence or a 6012 S/NVQ are acceptable**).

Workplace evidence may be gathered by a trained but not necessarily qualified assessor to form a portfolio that is then assessed as diverse evidence, by a qualified assessor, in line with the general requirements set out in this Appendix.

INTERNAL QUALITY ASSURANCE (INTERNAL VERIFIERS/INTERNAL QUALITY ASSURERS)

General

The centre MUST nominate all Internal Verifiers/Internal Quality Assurers (IV/IQA) to the Awarding Organisation/Awarding Body for approval prior to them conducting any verification activities. IVs/IQAs can be employed by the centre or be work based who may or may not be from the same organisation as the learners.

IVs/IQAs MUST be vocationally and occupationally competent in the areas they are verifying/quality assuring and have a thorough knowledge of the qualification units being assessed.

In addition to the qualifications listed below, the IVs/IQAs must be able to provide appropriate documented evidence that demonstrates they have a minimum of 5 years proven occupational experience in the activities they will be verifying. Particular attention should be paid to providing evidence of occupational experience in the gas safety critical areas being verified.

Internal Verifier/ Internal Quality Assurer Qualifications

Internal Verifiers/Internal Quality Assurers (IVs/IQAS) shall be technically qualified in domestic gas installation / maintenance and hold one of the following qualifications:

- C&G / SQA - S/NVQ in Domestic Natural Gas (Level 3);
or
- C&G - 662 Certificate for Service Engineers (Gas);
or
- C&G - 598-2 Certificate in Gas Installation Studies;
or
- C&G - 660 Certificate in Gas Fitting - Final

This list is not considered exhaustive and other 'Mechanical Engineering Services' (MES) or 'Building Engineering Services' (BES) qualifications at Level 3 or equivalent may be considered acceptable. Centres must submit requests to confirm the acceptability of other qualifications to their EV/QC for a decision regarding the acceptability of other qualifications. The EV/QC must keep a record of any such decisions.

In addition to the above the IV/IQA must hold a current certificate of gas safety competence in the areas of gas work they will be internally verifying that is not more than 5 years old (either current ACS Certificates of Gas Safety Competence or a 6012 Domestic Natural Gas S/NVQ are acceptable).

Where IVs/IQAs themselves do not hold a suitable technical qualifications they must have access to technical expertise from qualified personnel, who hold the relevant qualifications, to support them where the verification requires technical support and interpretation.

IVs/IQAs must hold the following:

- QCF Level Three Certificate "Assessing Vocationally Related Achievement"
or
 - A1 or D32/D33 with an upgrade to A1 as a minimum
or
 - *Learning and Development Unit L&D 9DI – Assess workplace competence using direct and indirect methods*
- And**
- QCF Level Four Award " Internal Quality assurance of assessment processes and practice"
or
 - QCF Level Four Certificate "leading the Internal Quality assurance of assessment processes and practice"
or
 - V1 or D34 with an upgrade to V1 as a minimum*
 - * The Teaching Qualification for Secondary Education (TQSE) or the Teaching Qualification for Further Education (TQFE) (which is recognised in Scotland) these awards are acceptable providing they are the versions that are recognised as equivalents to the A1 award plus appropriate CPD.
Internal Verifiers holding D units must have evidence of CPD to demonstrate compliance with the A and V units
- or
- SQA Accredited Learning and Development Unit L&D 11 "Internally monitor and maintain the quality of workplace assessment"

It is recommended that 'Candidate IVs/IQAs' have a clear action plan for achieving the IV/IQA qualification(s).

IV/IQA approval will be withdrawn if the qualification / units have not been attained within 18 months.

EXTERNAL QUALITY ASSURANCE (EXTERNAL VERIFIERS/QUALIFICATION CONSULTANTS)

General

External Verifiers/Qualification Consultants (EVs/QCs) MUST be appointed by the Awarding Body, be vocationally and occupationally competent in the areas they are verifying and have a thorough knowledge of the qualification units being assessed.

EVs/QCs must be able to provide appropriate documented evidence that demonstrates they have a minimum of 5 years proven occupational experience in the activities they will be verifying. Particular attention should be paid to providing evidence of occupational experience in the gas safety critical areas being verified.

External Verifier/Qualification Consultant Qualifications

EVs/QCs should be technically qualified in domestic gas installation / maintenance and hold **one of** the following qualifications:

- C&G / SQA - S/NVQ in Domestic Natural Gas (Level 3);
or
- C&G - 662 Certificate for Service Engineers (Gas);
or
- C&G - 598-2 Certificate in Gas Installation Studies;
or
- C&G - 660 Certificate in Gas Fitting - Final

This list is not considered exhaustive and other 'Mechanical Engineering Services' (MES) or 'Building Engineering Services' (BES) qualifications at Level 3 or equivalent may be considered acceptable with the prior approval of the Awarding Body.

In addition to the above the EV/QC should hold a current certificate of gas safety competence in the areas of gas work they will be verifying that is not more than 5 years old (either current ACS Certificates of Gas Safety Competence or a 6012 Domestic Natural Gas S/NVQ are acceptable) .

Where the EVs/QCs themselves do not hold a suitable technical qualifications they must have access to technical expertise from qualified personnel, who hold the relevant qualifications, to support them where the verification requires technical support and interpretation.

EVs/QCs MUST hold the following:

- QCF Level Three Certificate "Assessing Vocationally Related Achievement"
or
- A1 or D32 /D33 with an upgrade to A1 as a minimum or Learning and Development Unit L&D 9DI "Assess workplace competence using direct and indirect methods"

And

- QCF Level Four Award " Internal Quality assurance of assessment processes and practice"
or
- QCF Level Four Certificate "leading the Internal Quality assurance of assessment processes and practice"
or
- V1 or D34 with an upgrade to V1 as a minimum* (recommended)

And

- QCF Level Four Award “External Quality assurance of assessment processes and practice”
or
- QCF Level Four Certificate “leading the External Quality assurance of assessment processes and practice”
or
- V2 or D35 with an upgrade to V2 as a minimum*
* EVs/QCs holding D units must have evidence of CPD to demonstrate compliance with the A & V units
or

SQA Accredited Learning and Development Unit L&D 12 Externally monitor and maintain the quality of workplace assessment.

It is recommended that ‘Candidate EVs/QCs should have a clear action plan for achieving the EV/QC qualification(s).

EV/QC approval will be withdrawn if the qualification / units have not been attained within 12 months.

ELECTRICAL AND PLUMBING ASSESSOR/INTERNAL VERIFIER (INTERNAL QUALITY ASSURER)

COMPETENCE

The requirements for staff delivering and assessing the plumbing and electrical activities contained in this qualification are set out in the **Summit Skills Consolidated Assessment Strategy for Units and Qualifications of “Occupational Competence” in the Credit Framework (England, Northern Ireland and Wales) for the Building Services Engineering Sector**.

In general terms Gas Assessors and IVs/IQAs who meet the criteria to assess and internally verify the gas components of these qualifications will be eligible to assess and internally verify plumbing and/or electrical activities, **provided** that they can demonstrate the additional competence and experience required to competently assess electrical and/or plumbing work.

Additional evidence for this competence and experience may be in the form of relevant plumbing/electrical qualifications, minimum technical competence type awards, building regulations competent person’s schemes, CPD records and suitable work experience. This is not an exhaustive list and centres must submit requests to confirm the acceptability of other qualifications and experience to their EV/QC for a decision regarding the acceptability of other qualifications.

ELECTRICAL AND PLUMBING UNITS OF COMPETENCE

The units in scope of these additional Assessor/IV(IQA) requirements are:

DMES 02 Understand and Apply domestic cold water system installation and maintenance techniques

DMES 03 Understand and Apply domestic hot water system installation and maintenance techniques

DMES 04 Understand and Apply domestic central heating system installation and maintenance techniques

DMES 05 Understand and Apply domestic cold water system installation, commissioning, service and maintenance techniques

DMES 06 Understand and Apply domestic hot water system installation, commissioning, service and maintenance techniques

DMES 07 Understand and Apply domestic central heating system installation, commissioning, service and maintenance techniques

DHTG 02 Install and maintain domestic heating systems

DHTG 04 Install, commission, service and maintain domestic heating systems

MES 02 Understand and carry out electrical work on domestic plumbing and heating systems and components

REQUIREMENTS FOR ASSESSMENT

The Domestic Natural Gas qualifications are assessed through a combination of workplace assessment, simulation assessment and knowledge assessment.

The Diploma in Gas Utilisation: Core Skills and Knowledge (EUSGU001) (QCF Level 3; SCQF Level 6) is now an integral part, and a prerequisite of, all the Gas Utilisation qualifications. As such the following options are available to Learners:

- EUSGU001 may be completed as a stand-alone qualification* (see note 3 below)
- EUSGU001 may be completed as an introductory part of a larger qualification

* Important Notes

1. The assessment requirements set out in this document must be met in full.
2. In accordance with good practice and Ofqual requirements regarding Conflict of Interest in Assessment (Condition A4 in General Conditions of Regulation – Ofqual 2011) Assessors involved in providing direct training to a Learner, either as part of a group or on a 'one to one' basis should not carry out assessments for any of those trained aspects. Alternatively Awarding Organisations may put in place effective quality control measures to ensure that any potential conflicts of interest do not have an adverse effect on assessment outcomes.
3. The EUSGU001 Diploma, taken as a stand-alone qualification is not sufficient for eligibility for entry to the Gas Safe Register, via any assessment only route (eg. ACS). Candidates must complete a minimum of one of the range of Diplomas (EUSGU002-EUSGU024) to meet the requirements for Gas Safe Registration.
4. Gas Safe Register competence criteria are incorporated in all assessments. It is essential that the Awarding Organisations/Awarding Bodies update their Assessors and Assessment Materials to ensure that any changes to these criteria are reflected in the performance of the candidate from the date they become effective. (for example: if the IGE/UP/1B Testing procedure changed six months prior to the candidate completing the qualification, all assessments including testing from the change date, must be completed against the changed procedure standard).

PRACTICAL EVIDENCE

Learners must be able to practice on all specified unit components within the tables below.

RWE assessments must be included in the portfolio of evidence leading to completion of a qualification unit in line with the requirements set out for each unit. This must be supplemented by evidence gathered directly from the workplace as required for each unit and a work experience portfolio, signed off as accurate and authentic by a suitably qualified and Gas Safe Registered engineer.

Learners MUST demonstrate competence in the workplace during the performance of genuine work activities, by carrying out the tasks and duties that would be reasonably expected of them as a competent operative. Learners will be expected to have demonstrated competence in the assessed tasks over a period of time under normal working conditions to generate a sufficiency of evidence.

Learners who are undertaking one of the following listed Diplomas, all of which include a comprehensive range of appliances, may substitute the required workplace assessment shown in the tables below, with RWE assessment, subject to the following criteria:

- The Diploma is listed in this section of Appendix F
- The RWE substitution of workplace assessment may apply to one appliance only

- The remainder of workplace assessment requirements across the qualification range MUST remain as shown in the Unit tables included in this document
- Use of the RWE assessment substitution in place of workplace assessments shall only occur where the workplace assessment activity is not naturally occurring.
- The overall assessment volume MUST not be reduced below the volume specified in the tables included in this document.

The list of Diplomas in scope to the above approach:

- EUSGU017 Diploma in Gas Utilisation Installation: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water heating, Wet Central Heating and Domestic Warm Air (QCF Level 3 and SCQF Level 6)
- EUSGU018 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water heating, Wet Central Heating and Domestic Warm Air (QCF Level 3; SCQF Level 6)
- EUSGU019 Diploma in Gas Utilisation Installation & Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water heating, Wet Central Heating and Domestic Warm Air (QCF Level 3; SCQF Level 6)
- EUSGU024 Diploma in Gas Utilisation Maintenance: Cookers, Tumble Dryers, Leisure, Domestic Space Heating, Water heating, Limited Wet Central Heating and Domestic Warm Air (QCF Level 3; SCQF Level 6)
- EUSGU025(b) Diploma in Gas Utilisation: Technical Maintenance Engineer (QCF Level 3; SCQF Level 6)
- EUSGU025(c) Diploma in Gas Utilisation: Technical Installation and Maintenance Engineer (QCF Level 3; SCQF Level 6)

The gas industry is highly regulated regarding safety requirements and this is reflected in these qualifications. Certain Gas Safety related assessments must only be carried out under simulated conditions. Gas Safety critical activities within the Units will normally be assessed in a simulated RWE and where necessary these requirements are incorporated in the tables.

Subject to the Practical Evidence requirements section above, Learners must demonstrate competence in each Unit through assessments in line with the evidence and assessment requirement tables that follow:

Evidence and Assessment Requirement Tables:

Unit 3.1	Install domestic gas cookers, tumble dryers and leisure appliances		
<p>UNIT ASSESSMENT REQUIREMENTS:</p> <ul style="list-style-type: none"> Assessments must be carried out as documented in this table Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 			
3.1.1 Installation of a gas fired cooker			
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
<p>Primary Range:</p> <ul style="list-style-type: none"> Free Standing Cooker ¹ Hob ² <p>Secondary Range:</p> <ul style="list-style-type: none"> Flueless (Appliance Type A₁) Flexible Connection ³ Rigid Connection ⁴ 	<p>One Successful Assessment</p>	<p>Evidence of experience undertaking the satisfactory installation of gas fired cookers is required across the documented ranges.</p> <p>At least 5 ⁵ separate installation occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion.</p> <p>At least 3 ⁵ of the installation occasions must be from the workplace.</p>	<p>One Successful Assessment</p>
<p>Table Notes:</p> <p>¹ A 'Free Standing Cooker' for the purpose of this document is deemed to be a cooking appliance resting directly on the floor and comprising a gas fired hotplate, gas fired oven and possibly a grill and / or griddle.</p> <p>² A 'Hob' for the purpose of this document is deemed to be a independent gas fired hotplate designed to be installed into the kitchen work top.</p> <p>³ A 'Flexible Connection' for the purpose of this document is deemed to be a connection of the appliance between the termination point on the installation pipework and the appliance itself by means of a flexible connector and self-sealing plug in device.</p> <p>⁴ A 'Rigid Connection' for the purpose of this document is deemed to be a connection of the appliance between the termination point on the installation pipework and the appliance itself by means of rigid pipework incorporating an appliance isolation valve.</p> <p>⁵ The documented numbers required to be evidenced do include the assessment occasions.</p>			

Unit 3.2	Maintain domestic gas cookers, tumble dryers and leisure appliances
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UNIT ASSESSMENT REQUIREMENTS:

- Assessments must be carried out as documented in this table
- Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements.

3.2.1 Routine full service of a gas fired cooker

RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
<p>Primary Range:</p> <ul style="list-style-type: none"> • Free Standing Cooker¹ <p>Secondary Range:</p> <ul style="list-style-type: none"> • Flueless (Appliance Type A₁) 	One Successful Assessment	<p>Evidence of experience undertaking the satisfactory full servicing of gas fired cookers is required across the documented ranges.</p> <p>At least 5² separate servicing occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion</p> <p>At least 3² of the servicing occasions must be from the workplace.</p>	One Successful Assessment

3.2.2 Identify and repair faults on gas fired cookers

RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
<p>Primary Range:</p> <ul style="list-style-type: none"> • Free Standing Cooker¹ <p>Secondary Range:</p> <ul style="list-style-type: none"> • Flueless (Appliance Type A₁) • Gas Safety Control Defect • Electrical Control Defect 	One Successful Assessment	<p>Evidence of experience undertaking the identification and repairing of faults on gas fired cookers is required across the documented ranges.</p> <p>At least 5² separate fault rectification occasions must occur with the Learner demonstrating experience the Assessment Criteria on each occasion.</p> <p>At least 2² of the fault rectification occasions must be from the workplace.</p>	N/A

Table Notes:

- ¹ A 'Free Standing Cooker' for the purpose of this document is deemed to be a cooking appliance resting directly on the floor and comprising a gas fired hotplate, gas fired oven and possibly a grill and / or griddle.
- ² The documented numbers required to be evidenced do include the assessment occasions.

Unit 3.3		Install gas water heating and wet central heating appliances		
UNIT ASSESSMENT REQUIREMENTS: <ul style="list-style-type: none"> Assessments must be carried out as documented in this table Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 				
3.3.1 Installation of a gas fired boiler				
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT	
Primary Range: <ul style="list-style-type: none"> Traditional Boiler ¹ System Boiler ² Combination Boiler ³ Secondary Range: <ul style="list-style-type: none"> Room Sealed Fanned Draught Appliance (Horizontal Chimney) (Appliance Type C₁₂ or C₁₃) Room Sealed Fanned Draught Appliance (Vertical Chimney) (Appliance Type C₃₂ or C₃₃) Condensing Appliance New Installation Installation Exchange 	One Successful Assessment	Evidence of experience undertaking the satisfactory installation of gas fired boilers is required across the documented ranges. At least 5 ⁴ separate installation occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion. At least 3 ⁴ of the installation occasions must be from the workplace.	One Successful Assessment ⁵	
Table Notes: ¹ A 'Traditional Boiler' for the purpose of this document is deemed to be a boiler where the central heating system controls such as the pump, zone valves and other auxiliary controls are external to the appliance casing as supplied by the manufacturer. ² A 'System Boiler' for the purpose of this document is deemed to be a boiler where one or more of the central heating system controls such as the pump, zone valves and other auxiliary controls are internal to the appliance casing as supplied by the manufacturer. ³ A 'Combination Boiler' for the purpose of this document is deemed to be a boiler that provides instantaneous hot water to single or multiple hot water outlets, such as taps, with no water storage capacity (other than small quantities that may, by manufacturers design, be stored internally to prevent any delay in hot water delivery). ⁴ The documented numbers required to be evidenced do include the assessment occasions. ⁵ The appliance must be of a different 'Primary Range' type than that the one utilised as part of the RWE Assessment.				

Unit 3.4		Maintain gas water heating and wet central heating appliances		
UNIT ASSESSMENT REQUIREMENTS: <ul style="list-style-type: none"> Assessments must be carried out as documented in this table Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 				
3.4.1 Routine full service of a gas fired boiler				
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT	
Primary Range: <ul style="list-style-type: none"> Traditional Boiler ¹ System Boiler ² Combination Boiler ³ Gas Fire & Back Boiler ⁴ Secondary Range: <ul style="list-style-type: none"> Open-Flued Natural Draught Appliance (incl. Draught Diverter) (Appliance Type B₁₁) Room Sealed Natural Draught Appliance (Appliance Type C₁₁) Room Sealed Fanned Draught Appliance (Appliance Type C₁₂ or C₁₃ or C₃₂ or C₃₃ or C₅₂ or C₅₃) Condensing Appliance Non Condensing Appliance 	One Successful Assessment	Evidence of experience undertaking the satisfactory full servicing of gas fired boilers is required across the documented ranges. At least 5 ⁵ separate servicing occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion At least 3 ⁵ of the servicing occasions must be from the workplace.	One Successful Assessment ⁶	
3.4.2 Routine full service of a gas fired instantaneous water heater				
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT	
Primary Range: <ul style="list-style-type: none"> Multipoint Water Heater 	One Successful Assessment	N/A	N/A	
TABLE CONTINUED OVER THE PAGE				

Unit 3.4		Maintain gas water heating and wet central heating appliances (continued)	
3.4.3 Identify and repair faults on gas fired boilers and instantaneous water heaters			
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
<p>Primary Range:</p> <ul style="list-style-type: none"> • Traditional Boiler ¹ • System Boiler ² • Combination Boiler ³ • Multipoint Water Heater <p>Secondary Range:</p> <ul style="list-style-type: none"> • Open-Flued or Room Sealed Natural Draught Appliance (Appliance Type B₁₁ or C₁₁) • Open-Flued or Room Sealed Fanned Draught Appliance (Appliance Type B₁₂ or B₁₃ or B₁₄ or C₁₂ or C₁₃ or C₃₂ or C₃₃) • Gas Safety Control Defect ⁷ • Electrical Control Defect ⁷ • Water Control Defect ⁷ 	<p>One Successful Assessment</p>	<p>Evidence of experience undertaking the identification and repairing of faults on gas fired boilers and instantaneous water heaters is required across the documented ranges.</p> <p>At least 4 ⁵ separate fault rectification occasions must occur with the Learner demonstrating experience the Assessment Criteria on each occasion.</p> <p>At least 2 ⁵ of the fault rectification occasions must be from the workplace.</p>	<p>N/A</p>
<p>Table Notes:</p> <p>¹ A 'Traditional Boiler' for the purpose of this document is deemed to be a boiler where the central heating system controls such as the pump, zone valves and other auxiliary controls are external to the appliance casing as supplied by the manufacturer.</p> <p>² A 'System Boiler' for the purpose of this document is deemed to be a boiler where one or more of the central heating system controls such as the pump, zone valves and other auxiliary controls are internal to the appliance casing as supplied by the manufacturer.</p> <p>³ A 'Combination Boiler' for the purpose of this document is deemed to be a boiler that provides instantaneous hot water to single or multiple hot water outlets, such as taps, with no water storage capacity (other than small quantities that may, by manufacturers design, be stored internally to prevent any delay in hot water delivery).</p> <p>⁴ A 'Gas Fire & Boiler' for the purpose of this document is deemed to be a boiler, not a back circulator, that is connected to a flexible flue liner and has a gas fire connected to the front of the appliance.</p> <p>⁵ The documented numbers required to be evidenced do include the assessment occasions.</p> <p>⁶ The appliance must be of a different 'Primary Range' type than that the one utilised as part of the RWE Assessment.</p> <p>⁷ The defects listed are 'Appliance Defects' and relate to controls within the appliance casing and do not refer to defects on controls on the heating or hot water systems.</p>			

Unit 3.5		Install gas pipework (≤ 35 mm)	
<p>UNIT ASSESSMENT REQUIREMENTS:</p> <ul style="list-style-type: none"> Assessments must be carried out as documented in this table Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 			
3.5.1 Install gas pipework			
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
<p>Primary Range:</p> <ul style="list-style-type: none"> Copper Tube Steel Tube Corrugated Stainless Steel Tube (CSST) Polyethylene Tube (pe) <p>Secondary Range:</p> <ul style="list-style-type: none"> Through Walls Under Wooden Floors Surface Mounted Capillary Joints Compression Joints CSST Joints Screwed Joints Formed Bends 	One Successful Assessment	<p>Evidence of experience undertaking the satisfactory tightness testing and purging is required across the documented ranges.</p> <p>At least 5¹ separate installation occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion.</p> <p>At least 3¹ of the installation occasions must be from the workplace.</p>	One Successful Assessment
<p>Table Notes:</p> <p>¹ The documented numbers required to be evidenced do include the assessment occasions.</p>			

Unit 3.6		Gas tightness testing and direct purging (IGEM/UP/1B)	
UNIT ASSESSMENT REQUIREMENTS: <ul style="list-style-type: none"> Assessments must be carried out as documented in this table Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 			
3.6.1 Tightness testing and purging gas installations			
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
Primary Range: <ul style="list-style-type: none"> Natural Gas Installations LPG Installations Secondary Range: <ul style="list-style-type: none"> Purge Natural Gas Installation with Volume $\leq 0.02 \text{ m}^3$ Purge Natural Gas Installation with Volume $> 0.02 \text{ m}^3 \leq 0.035 \text{ m}^3$ Including a Meter New Installation Existing Installation 	One Successful Assessment	Evidence of experience undertaking the satisfactory tightness testing and purging is required across the documented ranges. At least 5 ¹ separate installation occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion. At least 3 ¹ of the installation occasions must be from the workplace.	One Successful Assessment ²
Table Notes: ¹ The documented numbers required to be evidenced do include the assessment occasions. ² The assessment must be of a different 'Primary Range' type than that the one utilised as part of the RWE Assessment.			

Unit 3.7		Install domestic gas space heating appliances		
UNIT ASSESSMENT REQUIREMENTS: <ul style="list-style-type: none"> Assessments must be carried out as documented in this table Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 				
3.7.1 Installation of a gas fired space heating appliance				
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT	
Primary Range: <ul style="list-style-type: none"> Outset Gas Fire ¹ Inset Live Fuel Effect Gas Fire Decorative Fuel Effect Appliance Convactor Heater ² Secondary Range: <ul style="list-style-type: none"> Flueless (Appliance Type A₁) Open-Flued Natural Draught Appliance (Appliance Type B_{1,1} or B_{2,1}) Room Sealed Natural Draught Appliance (Appliance Type C_{1,1}) Open-Flued or Room Sealed Fanned Draught Appliance (Appliance Type B_{1,2} or B_{1,3} or B_{1,4} or B_{2,2} or B_{2,3} or C_{1,2} or C_{1,3}) 	One Successful Assessment	Evidence of experience undertaking the satisfactory installation of gas fired space heating appliances is required across the documented ranges. At least 5 ³ separate installation occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion. At least 3 ³ of the installation occasions must be from the workplace.	One Successful Assessment ⁴	
Table Notes: ¹ An 'Outset Gas Fire' for the purpose of this document is deemed to be a gas fire incorporating a radiating surface, either in the form of a radiant or imitation fuel, that is either hearth or wall mounted in front of a closure plate which is fitted to a fireplace opening. ² A 'Convactor Heater' for the purpose of this document is deemed to be an appliance that is designed to heat a room mainly by the emission of air heated by convection. ³ The documented numbers required to be evidenced do include the assessment occasions. ⁴ The appliance must be of a different 'Primary Range' type than that the one utilised as part of the RWE Assessment.				

Unit 3.8	Maintain domestic gas space heating appliances
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UNIT ASSESSMENT REQUIREMENTS:

- Assessments must be carried out as documented in this table
- Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements.

3.8.1 Routine full service of a gas fired space heating appliance
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RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
<p>Primary Range:</p> <ul style="list-style-type: none"> Outset Gas Fire ¹ Inset Live Fuel Effect Gas Fire Decorative Fuel Effect Appliance Convector Heater ² <p>Secondary Range:</p> <ul style="list-style-type: none"> Flueless <i>(Appliance Type A₁)</i> Open-Flued Natural Draught Appliance <i>(Appliance Type B₁₁ or B₂₁)</i> Room Sealed Natural Draught Appliance <i>(Appliance Type C₁₁)</i> Open-Flued or Room Sealed Fanned Draught Appliance <i>(Appliance Type B₁₂ or B₁₃ or B₁₄ or B₂₂ or B₂₃ or C₁₂ or C₁₃)</i> 	One Successful Assessment	<p>Evidence of experience undertaking the satisfactory full servicing of gas fired space heating appliances is required across the documented ranges.</p> <p>At least 5 ³ separate servicing occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion</p> <p>At least 3 ³ of the servicing occasions must be from the workplace.</p>	One Successful Assessment ⁴

3.8.2 Identify and repair faults on gas fired space heating appliances

RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
<p>Primary Range:</p> <ul style="list-style-type: none"> Outset Gas Fire ¹ Inset Live Fuel Effect Gas Fire Decorative Fuel Effect Appliance Convector Heater ² <p>Secondary Range:</p> <ul style="list-style-type: none"> Flueless <i>(Appliance Type A₁)</i> Open-Flued or Room Sealed Natural Draught Appliance <i>(Appliance Type B₁₁ or B₂₁ or C₁₁)</i> Open-Flued or Room Sealed Fanned Draught Appliance <i>(Appliance Type B₁₂ or B₁₃ or B₁₄ or B₂₂ or B₂₃ or C₁₂ or C₁₃)</i> Gas Safety Control Defect Electrical Control Defect 	One Successful Assessment	<p>Evidence of experience undertaking the identification and repairing of faults on gas fired space heating appliances is required across the documented ranges.</p> <p>At least 5 ³ separate fault rectification occasions must occur with the Learner demonstrating experience across of the Assessment Criteria on each occasion.</p> <p>At least 2 ³ of the fault rectification occasions must be from the workplace.</p>	N/A

Continued from previous page: Table Notes for Unit 3.8:

- ¹ An 'Outlet Gas Fire' for the purpose of this document is deemed to be a gas fire incorporating a radiating surface, either in the form of a radiant or imitation fuel, that is either hearth or wall mounted in front of a closure plate which is fitted to a fireplace opening.
- ² A 'Convactor Heater' for the purpose of this document is deemed to be an appliance that is designed to heat a room mainly by the emission of air heated by convection.
- ³ The documented numbers required to be evidenced do include the assessment occasions.
- ⁴ The appliance must be of a different 'Primary Range' type than that the one utilised as part of the RWE Assessment.

Table 3.9 is no longer part of this suite and has been deleted

Unit 3.10	Install gas warm air central heating systems and appliances		
<p>UNIT ASSESSMENT REQUIREMENTS:</p> <ul style="list-style-type: none"> • Assessments must be carried out as documented in this table • Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 			
3.10.1 Installation of a gas fired ducted air heater			
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
<p>Primary Range:</p> <ul style="list-style-type: none"> • Ducted Air Heater ¹ <p>Secondary Range:</p> <ul style="list-style-type: none"> • Open-Flued Natural Draught Appliance (Appliance Type B₁₁ or B₂₁) • Room Sealed Fanned Draught Appliance (Appliance Type C₁₂ or C₁₃ or C₃₂ or C₃₃) • Compartment Installation • Positive Return Air Duct • Installation Exchange 	<p>One Successful Assessment</p>	<p>Evidence of experience undertaking the satisfactory installation of gas fired ducted air heating appliances is required across the documented ranges.</p> <p>At least 5 ² separate installation occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion.</p> <p>At least 3 ² of the installation occasions must be from the workplace.</p>	<p>One Successful Assessment</p>
<p>Table Notes:</p> <ul style="list-style-type: none"> ¹ A 'Ducted Air Heater' for the purpose of this document is deemed to be a flued warm air heating appliance that uses ducting to distribute the heating air around a premise. ² The documented numbers required to be evidenced do include the assessment occasions. 			

Unit 3.11		Maintain gas warm air central heating systems and appliances		
UNIT ASSESSMENT REQUIREMENTS:				
<ul style="list-style-type: none"> Assessments must be carried out as documented in this table Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 				
3.11.1 Routine full service of a gas fired ducted air heater				
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT	
Primary Range: <ul style="list-style-type: none"> Ducted Air Heater ¹ Secondary Range: <ul style="list-style-type: none"> Open-Flued Natural Draught Appliance <i>(Appliance Type B₁₁ or B₂₁)</i> Room Sealed Fanned Draught Appliance <i>(Appliance Type C₁₂ or C₁₃ or C₃₂ or C₃₃)</i> Compartment Installation Positive Return Air Duct 	One Successful Assessment	Evidence of experience undertaking the satisfactory full servicing of gas fired ducted air heating appliances is required across the documented ranges. At least 5 ² separate servicing occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion At least 3 ² of the servicing occasions must be from the workplace.	One Successful Assessment ⁴	
3.11.2 Identify and repair faults on gas fired ducted air heaters				
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT	
Primary Range: <ul style="list-style-type: none"> Ducted Air Heater ¹ Secondary Range: <ul style="list-style-type: none"> Open-Flued Natural Draught Appliance <i>(Appliance Type B₁₁ or B₂₁)</i> Room Sealed Fanned Draught Appliance <i>(Appliance Type C₁₂ or C₁₃ or C₃₂ or C₃₃)</i> Gas Safety Control Defect Electrical Control Defect 	One Successful Assessment	Evidence of experience undertaking the identification and repairing of faults on gas fired ducted air heating appliances is required across the documented ranges. At least 5 ² separate fault rectification occasions must occur with the Learner demonstrating experience across of the Assessment Criteria on each occasion. At least 2 ² of the fault rectification occasions must be from the workplace.	N/A	
Table Notes:				
¹ A 'Ducted Air Heater' for the purpose of this document is deemed to be a flued warm air heating appliance that uses ducting to distribute the heating air around a premise.				
² The documented numbers required to be evidenced do include the assessment occasions.				

Unit 3.12		Install gas meters and regulators ($\geq 2.5 \text{ m}^3/\text{h} \leq 16 \text{ m}^3/\text{h}$)	
UNIT ASSESSMENT REQUIREMENTS: <ul style="list-style-type: none"> Assessments must be carried out as documented in this table Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 			
3.12.1 Installation of a gas meter			
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
Primary Range: <ul style="list-style-type: none"> Meter $\leq 6 \text{ m}^3/\text{h}$ Meter $> 6 \text{ m}^3/\text{h} \leq 16 \text{ m}^3/\text{h}$ Secondary Range: <ul style="list-style-type: none"> Credit Meter Prepayment Meter Low Pressure Fed Supply Medium Pressure Fed Supply Internal Installation Surface or Built In Meter Box Semi Concealed Meter Box New Installation Installation Exchange 	One Successful Assessment	Evidence of experience undertaking the satisfactory installation of gas meters is required across the documented ranges. At least 10 ¹ separate installation occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion. At least 6 ¹ of the installation occasions must be from the workplace.	One Successful Assessment
Table Notes: ¹ The documented numbers required to be evidenced do include the assessment occasions.			

Unit 3.13		Install gas meters and regulators ($\geq 2.5 \text{ m}^3/\text{h} \leq 1076 \text{ m}^3/\text{h}$)	
UNIT ASSESSMENT REQUIREMENTS:			
<ul style="list-style-type: none"> Assessments must be carried out as documented in this table Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 			
3.13.1 Installation of a gas meter			
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
Primary Range: <ul style="list-style-type: none"> Diaphragm Meter $>16\text{m}^3/\text{hr}$ $<160 \text{ m}^3/\text{h}$ Rotary Displacement Meter $\leq 1076 \text{ m}^3/\text{h}$ Secondary Range: <ul style="list-style-type: none"> Low Pressure Fed Supply Medium Pressure Fed Supply Internal Installation Meter Kiosk Meter with a Bypass New Installation Installation Exchange 	One Successful Assessment	Evidence of experience undertaking the satisfactory installation of gas meters is required across the documented ranges. At least 5 ¹ separate installation occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion. At least 3 ¹ of the installation occasions must be from the workplace.	One Successful Assessment
Table Notes:			
¹ The documented numbers required to be evidenced do include the assessment occasions.			

Table 3.14 is no longer part of this suite and has been deleted

Unit 3.15		Dealing with reported gas upstream emergencies	
<p>UNIT ASSESSMENT REQUIREMENTS:</p> <ul style="list-style-type: none"> Assessments must be carried out as documented in this table Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 			
3.15.1 Dealing safely with reported gas emergencies on the gas distribution (upstream) side of a main control valve			
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
<p>Primary Range:</p> <ul style="list-style-type: none"> Gas Distribution Assets ¹ Low Pressure leakage Medium Pressure leakage LPG Installations Non Domestic Premises ² Domestic Premises Confined Spaces <p>Secondary Range:</p> <ul style="list-style-type: none"> Site Survey Risk Assessment Evacuation and Reoccupation No Access Forced Entry Reported Poor Pressure Detection Methods Concentration Readings Water Ingress to assets No Trace Third Party Liaison⁵ Teamworking Verbal Communication Documented Reporting 	One Successful Assessment	<p>Evidence of experience undertaking the satisfactory response and action is required across both primary and secondary ranges.</p> <p>Sourced from a minimum of 10³ separate reported emergency occasions the Learner must satisfy some (but not necessarily all) of the Assessment Criteria on each occasion.</p> <p>The sum total of collected evidence must cover all the Primary and Secondary Ranges</p> <p>At least 6³ of the occasions generating evidence must be from the workplace.</p>	One Successful Assessment ⁴
<p>Table Notes:</p> <p>¹ Gas Distribution Assets include: Mains, Services, Meters, Regulators and all other Valves and Mechanical Controls that form part of the gas infrastructure outside premises.</p> <p>² Non Domestic Premises include: Commercial Premises such as Shops, Factories, Hotels and Restaurants etc.</p> <p>³ The documented numbers required to be evidenced do include the assessment occasions.</p> <p>⁴ The assessment must involve a different 'Primary Range' category than that the one utilised as part of the RWE Assessment.</p> <p>⁵ To include: Emergency Services and other external Agencies such as the HSE</p>			

Unit 3.16	Dealing with reported gas downstream emergencies
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UNIT ASSESSMENT REQUIREMENTS:

- Assessments must be carried out as documented in this table
- Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements.

3.16.1 Dealing safely with reported gas emergencies on the gas utilisation (downstream) side of a main control valve

RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
<p>Primary Range:</p> <ul style="list-style-type: none"> • Meter and Regulator ¹ • Internal Appliances • Domestic Premises • Non Domestic Premises ² • Low Pressure Installation • Medium Pressure Installation <p>Secondary Range:</p> <ul style="list-style-type: none"> • Controlled ³ • Uncontrolled • LPG escapes • No Gas • No Trace • Reports of Fumes ⁴ • Blocked Chimneys • Gas Ingress to Premises • Evacuation and Reoccupation • Third Party Liaison ⁵ • Teamworking • Leaving site in safe condition ⁶ • Verbal Communication • Documented Reporting 	<p>One Successful Assessment</p>	<p>Evidence of experience undertaking the satisfactory response and action is required across both primary and secondary ranges.</p> <p>Sourced from a minimum of 10 ³ separate reported emergency occasions the Learner must satisfy some (but not necessarily all) of the Assessment Criteria on each occasion.</p> <p>The sum total of collected evidence must cover all the Primary and Secondary Ranges</p> <p>At least 6 ³ of the occasions generating evidence must be from the workplace.</p>	<p>One Successful Assessment ⁸</p>

Table Notes:

- ¹ All types of meter with associated Control Valve(s) and Regulator(s)
- ² Non Domestic Premises include: Commercial Premises such as Shops, Factories, Hotels and Restaurants etc.
- ³ Where the gas supply has been turned off prior to the arrival of the emergency response engineer
- ⁴ To include: active Carbon Monoxide Alarms, customer reports, visual checks on appliances
- ⁵ To include: Emergency Services and other external Agencies such as the HSE
- ⁶ To protect Life, Property and the Environment
- ⁷ The documented numbers required to be evidenced do include the assessment occasions.
- ⁸ The assessment must involve a different 'Primary Range' category than that the one utilised as part of the RWE Assessment.

Unit 3.17		Strength testing, tightness testing and direct purging (IGEM/UP/1A)	
UNIT ASSESSMENT REQUIREMENTS: <ul style="list-style-type: none"> Assessments must be carried out as documented in this table Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 			
3.17.1 Strength testing, tightness testing and direct purging (IGE/UP/1A)			
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
Primary Range: <ul style="list-style-type: none"> Strength Test Tightness Test Commissioning Purge Decommissioning Purge Secondary Range: <ul style="list-style-type: none"> New Installation Existing Installation Pipework Only Metered Installation Appliance Connection Test 	One Successful Assessment ¹	<p>Evidence of experience undertaking the satisfactory strength testing, tightness testing and direct purging is required across the documented ranges.</p> <p>At least 5 ² separate installation occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion.</p> <p>At least 3 ² of the installation occasions must be from the workplace.</p>	N/A
Table Notes: ¹ The RWE Assessment shall cover all the 'Primary Range' ² The documented numbers required to be evidenced do include the assessment occasions.			

Unit GSM 2.0	Prepare, install and commission natural gas smart meter and regulator ($\leq 6 \text{ m}^3/\text{h}$)		
UNIT ASSESSMENT REQUIREMENTS: <ul style="list-style-type: none"> Assessments must be carried out as documented in this table Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 			
GSM 2.0.1 Installation of a gas smart meter			
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
Primary Range: <ul style="list-style-type: none"> Smart Meter $\leq 6 \text{ m}^3/\text{h}$ Secondary Range: <ul style="list-style-type: none"> Low Pressure Fed Supply Internal Installation Surface or Built In Meter Box Semi Concealed Meter Box New Installation Installation Exchange 	One Successful Assessment	Evidence of experience undertaking the satisfactory installation of gas smart meters is required across the documented ranges. At least 10 ¹ separate installation occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion. At least 6 ¹ of the installation occasions must be from the workplace.	One Successful Assessment ²
Table Notes: 1 The documented numbers required to be evidenced do include the assessment occasions. 2 This assessment may be undertaken by gas utilisation qualified personnel without an assessor qualification (see Important Note on Page 34)			

Unit GSM 3.0		Low pressure smart meter tightness testing and direct purging (IGEM/UP/1B)	
UNIT ASSESSMENT REQUIREMENTS: <ul style="list-style-type: none"> Assessments must be carried out as documented in this table Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 			
3.0.1 Tightness testing and purging gas installations			
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
Primary Range: <ul style="list-style-type: none"> Natural Gas Installations Secondary Range: <ul style="list-style-type: none"> Purge Natural Gas Installation with Volume $\leq 0.02 \text{ m}^3$ Purge Natural Gas Installation with Volume $> 0.02 \text{ m}^3 \leq 0.035 \text{ m}^3$ New Installation Existing Installation 	One Successful Assessment	Evidence of experience undertaking the satisfactory tightness testing and purging is required across the documented ranges. At least 5 ¹ separate installation occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion. At least 3 ¹ of the installation occasions must be from the workplace.	One Successful Assessment ²
Table Notes: 1 The documented numbers required to be evidenced do include the assessment occasions 2 This assessment may be undertaken by gas utilisation qualified personnel without an assessor qualification (see Important Note on Page 34)			

Unit GSM 4.0		Prepare, install and commission smart gas meter and regulator <i>(Natural Gas Meter ≤ 6 m³/h with MOPu > 75 mbar ≤ 2 bar)</i>	
UNIT ASSESSMENT REQUIREMENTS: <ul style="list-style-type: none"> Assessments must be carried out as documented in this table Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 			
GSM 4.0.1 Installation of a gas smart meter fed by a medium pressure supply <i>(MOPu > 75 mbar ≤ 2 bar)</i>			
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
Primary Range: <ul style="list-style-type: none"> Smart Meter ≤ 6 m³/h Secondary Range: <ul style="list-style-type: none"> Medium Pressure Fed Supply Regulator Incorporating a Slam Shut Valve (SSV) <i>(PRS 28/E)</i> Regulator Incorporating a Metering Installation Excess Flow Valve (MIEFV) <i>(PRS 29/E)</i> Surface or Built In Meter Box Semi Concealed Meter Box New Installation Installation Exchange <i>(Existing Installation with NO Meter Inlet Valve (MIV))</i> 	One Successful Assessment	Evidence of experience undertaking the satisfactory installation of gas smart meters is required across the documented ranges. At least 5 ¹ separate installation occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion. At least 3 ¹ of the installation occasions must be from the workplace.	One Successful Assessment
Table Notes: ¹ The documented numbers required to be evidenced do include the assessment occasions.			

COMBINED SMART GAS METER INSTALLATION UNITS GSM 2.0 & GSM 4.0			
Unit GSM 2.0	Prepare, install and commission smart gas meter and regulator <i>(Natural Gas Meter $\leq 6 \text{ m}^3/\text{h}$ with MOPu $\leq 75 \text{ mbar}$)</i>		
Unit GSM 4.0	Prepare, install and commission smart gas meter and regulator <i>(Natural Gas Meter $\leq 6 \text{ m}^3/\text{h}$ with MOPu $> 75 \text{ mbar} \leq 2 \text{ bar}$)</i>		
UNIT ASSESSMENT REQUIREMENTS:			
<ul style="list-style-type: none"> Assessments must be carried out as documented in this table Learners must demonstrate sufficient evidence of competence through experience of satisfactorily undertaking the work activities documented across the full range. This shall be evidenced via the Learners Portfolio and be assessed as meeting the minimum documented requirements. 			
GSM 2.0.1 & GSM 4.0.1 Installation of a gas smart meter fed by a low pressure supply or a medium pressure supply <i>(Low Pressure - MOPu $\leq 75 \text{ mbar}$ / Medium Pressure - MOPu $> 75 \text{ mbar} \leq 2 \text{ bar}$)</i>			
RANGE	RWE ASSESSMENT	ASSESSMENT OF EXPERIENCE	WORKPLACE ASSESSMENT
Primary Range: <ul style="list-style-type: none"> Smart Meter $\leq 6 \text{ m}^3/\text{h}$ Secondary Range: <ul style="list-style-type: none"> Low Pressure Medium Pressure Fed Supply Regulator Incorporating a Slam Shut Valve (SSV) <i>(PRS 28/E)</i> Regulator Incorporating a Metering Installation Excess Flow Valve (MIEFV) <i>(PRS 29/E)</i> Surface or Built In Meter Box Semi Concealed Meter Box New Installation Installation Exchange <i>(Existing Installation with NO Meter Inlet Valve (MIV))</i> 	Two Successful Assessments ¹	Evidence of experience undertaking the satisfactory installation of gas smart meters is required across the documented ranges. At least 10 ² separate installation occasions must occur with the Learner demonstrating experience across the Assessment Criteria on each occasion. At least 8 ³ of the installation occasions must be from the workplace.	Two Successful Assessments
Table Notes: ¹ One assessment to be on a low pressure fed meter, one assessment to be on a medium pressure fed meter. ² The documented numbers required to be evidenced do include the assessment occasions ³ Four assessments to be on a low pressure fed meter, four assessments to be on a medium pressure fed meter			

Additional Scheme Requirements

Generic Core Knowledge Units

All knowledge criteria must be evidenced by learners. Awarding Organisations/Awarding Bodies can use a variety of assessment methods which will demonstrate that learners have successfully met the unit criteria. These can include Closed Book Written Questions, Open Book Written Questions, Recorded Oral Questions, Projects and Assignments.

Specific Core Knowledge and Performance Units

All knowledge and performance criteria must be evidenced by learners. Awarding Organisations/Awarding Bodies can use a variety of assessment methods which will demonstrate that learners have successfully met the unit criteria. These can include Closed Book Written Questions, Open Book Written Questions, and Recorded Oral Questions, Projects and/or Assignments, Evidence from Practical Assessments conducted in a RWE and evidence from Practical Assessments conducted in the workplace.

Optional Knowledge and Performance Units

All knowledge and performance criteria must be evidenced by learners. Awarding Organisations/Awarding Bodies must ensure that the “Assessment Strategy Evidence and Assessment Requirement Tables” produced for each unit are followed. A variety of assessment methods can be used to demonstrate that learners have successfully met the unit criteria. These can include Closed Book Written Questions, Open Book Written Questions, Recorded Oral Questions, Projects, Assignments, Evidence from Practical Assessments conducted in a RWE and evidence from Practical Assessments conducted in the workplace.

Matters of Gas Safety

Awarding Organisations must ensure that all units and the associated “matters of gas safety criteria” are referenced to those issued by Energy & Utility Skills. The “Matters of Gas Safety” criteria are updated on a six monthly cycle and any changes must be implemented in line with the industry requirements agreed with Gas Safe Register.

Realistic Working Environment (RWE) Assessments

RWE simulated assessment may only be used as specified and, if necessary, with the prior approval of the External Verifier/Qualification Consultant (see previous section). Any approval given by the EV/QC MUST be recorded and filed in the centre’s Quality Manual and in the ‘Learner’s Portfolio’ for audit purposes.

These assessments will normally be installation and maintenance activities conducted in a workshop area. These areas are considered to be a ‘managed’ environment because there is a degree of control over the conditions under which the activity is undertaken. The simulation activities and areas will normally include:

- real time pressures;

- a range of appliances, applicable to the assessment types;
- a variety of flue types, e.g. Type 'B', Type 'C', natural & fanned draught with a range of construction methods;
- a range of potential hazards that could realistically be found in a domestic dwelling, e.g. combustible surfaces, opening windows, doors, fans, curtains etc. (*Note: these hazards may be simulated*);
- a range of installation conditions, e.g. surface installation, under floor installation, through wall installation etc.
- a range of building material types, e.g. brick walls, block walls, plaster board and timber walls.

The RWE must take account of health and safety requirements for risk assessments, gas safety related issues and against other activities where generating evidence is limited.

RECOGNITION OF PRIOR LEARNING (RPL)

Recognition of Prior Learning (RPL) evidence is an acceptable source of evidence for these qualifications. All evidence shall be sufficient, valid, reliable, authentic and current (within the last three years).

For evidence of gas safety competence the following constraints shall apply:

- Certificates covering the competence criteria for Gas Safe Registration are acceptable as RPL evidence. However, as these do not attest to competence in the other essential aspects of gas installation and maintenance, all unit requirements must be satisfied in full to achieve the qualification. All evidence of current gas safety competence **MUST** be demonstrated throughout the qualification being undertaken.

All RPL evidence must be approved by the centre's RPL Advisor. The RPL Advisor shall hold D36 or equivalent.

GATHERING EVIDENCE

In order to achieve a qualification, Learners **MUST** produce sufficient evidence of competence.

Documentation must be provided to ensure that evidence of competence is gathered, organised and recorded in a uniform manner across all centres.

Where appropriate, learners may provide evidence of prior learning (see RPL Section of this Guide).

Witness testimony may be used as supporting evidence to cover the range of activities not covered naturally by workplace assessment. This evidence will normally be via a completed document signed by a 'Technically and Occupationally Competent Witness' (the centre's EV/QC will be able to give further advice on the use of witness testimony). **Note:** Witness testimony is not acceptable as evidence to meet the "Matters of Gas Safety" criteria, incorporated into each qualification.

THE LEARNER'S PORTFOLIO

The learner portfolio documents the evidence which will demonstrate learner progress. It records their assessment achievement, development and work experience leading to the attainment of their chosen qualification.

The 'Learner's Portfolio' could be made up of a combination of the following:

- Summary of the results from Knowledge & Understanding Question Papers
- Summary of the results from Assessments (RWE/Workplace)
- Assessment sheets
- Copies of all Learner specific questions together with a record of the answers given (oral or written)
- Feedback sheets

- Workplace Experience Evidence
- Witness Statements
- Work Method Statements
- Evidence of Prior Learning (RPL Evidence)
- Assessor Assessment Plans - feedback to Learners
- Company or employer job sheets and specifications
- Curriculum Vitae
- Photographic Evidence

WITNESS TESTIMONY

'Witness Testimony' can NOT be accepted as a primary source of evidence for all work activities. 'Witness Testimony' may be used as supporting evidence to cover the range of activities not covered by 'Workplace Assessment' or RWE Assessment.

'Witness Testimony' evidence can only be accepted if the testimony is completed by a 'Technically and Occupationally Competent Witness' and will normally be in the form of a completed and signed source of evidence with other supporting evidence (e.g. company or employer job sheets, photographic evidence). The centre's External Verifier will be able to give further advice on the use of witness testimony.

The evidence provided by 'Witness Testimony' and other non-observed sources must be substantiated by an Assessor (e.g. by confirming the suitability of the witness and by professional discussion). Once the evidence has been substantiated and suitably documented, then it can be referenced to the appropriate record of achievement by the Assessor.

WRITTEN & ORAL QUESTIONING

Assessors should use questioning where they consider it is appropriate to fully cover the subject area being assessed and to allow the Learner to evidence their full understanding.

When using oral questions, Assessors should be mindful of the effect their behaviour can have on the Learner's performance. Questions should be asked in the spirit of gaining information rather than pressurising a Learner by creating the atmosphere of a test.

ALL oral questions must be relevant to the assessment criteria and the Assessor MUST NOT coach or lead the Learner towards providing correct answers. The Assessor MUST NOT ask the Learner any 'leading' or 'closed' questions. Assessors should take care to ask clear questions.

Questions and the Learner's responses should be recorded on the appropriate assessment documentation, for example on the 'Feedback Sheet' provided.

FEEDBACK

Learners shall be given feedback at appropriate times during the completion of their qualification, as determined suitable by the Assessor, employer, mentor, etc. This would normally be associated with an assessment activity with Assessor involvement and should be given as soon as practical after the completion of the activity.

It is important that a copy of all feedback and oral questioning sessions with Learners are kept for inclusion in the Learner Portfolio.

Notes from feedback and oral questioning sessions might not include a precise record of the feedback, questions and answers to every question, but a summary of the feedback, questions and answers must be recorded with reference to specific criteria as necessary.

EXTERNAL QUALITY CONTROL REQUIREMENTS

All Awarding Organisations/Awarding Bodies offering these qualifications must operate and maintain a robust quality assurance process to ensure that the assessment requirements set out in this document are delivered to the specification provided.

GLOSSARY OF TERMS

Approved Centre: an organisation inspected by the Awarding Organisation/Awarding Body and deemed to have the trained staff and resources to make assessment arrangements for particular qualifications

Assessor: person accountable to the external verifier (through the internal verifier) who is both experienced and qualified/or working towards qualifications in assessing Learners. Assessor skills include observation, evaluation, making judgements about individual performance.

Assessors may be based in the workplace, in an approved centre such as a college, or be peripatetic, visiting Learners in a variety of situations.

Assessment Plan: Between Assessor and Learner a structured approach is used to specify how, where and when evidence will be generated and what method of assessment will be used. This information is recorded, dated and signed by assessor and Learner and is used as the basis for review meetings between Learner and assessor.

Awarding Organisation/Awarding Body: an organisation recognised by Qualification Regulatory Authorities for the purpose of awarding qualifications

Learner: employee or student / trainee who wishes to be assessed in order to gain a qualification (formerly referred to as a candidate).

Competence: an assessment based on the Learner's ability to perform a task to a defined standard specified in the National Occupational Standards.

Evidence: the means by which an External Verifier/Qualification Consultant can be satisfied that an individual has been properly assessed, usually a combination of completed/endorsed witness statements, and assessments by a qualified assessor with additional documentation collected in a portfolio of evidence.

External Verifier (EV): person accountable to the Awarding Body/Awarding Organisation who by monitoring and advising internal verifiers/Internal Quality Assurers and assessors effects quality assurance

Internal Verifier (IV): person accountable to the external verifier/qualification consultant and the Awarding Body who is based in the approved centre and who co-ordinates assessment arrangements and monitors assessor standards.

Internal Quality Assurer (IQA): person accountable to the external verifier/qualification consultant and the Awarding Body who is based in the approved centre and who co-ordinates assessment arrangements and monitors assessor standards. Alternative title to 'Internal Verifier'

National Standard of Work (Performance Criteria): required from learners to demonstrate their capability.

National/Scottish Vocational Qualification: a qualification recognised by Qualification Regulatory Authorities as being relevant to the need of industry.

Portfolio: a structured collection of evidence from several sources, gathered together and referenced to the National Occupational Standards, in which a learner's achievements are recorded.

Qualification Consultant (QC): person accountable to the Awarding Body/Awarding Organisation who by monitoring and advising internal verifiers/Internal Quality Assurers and assessors effects quality assurance. Alternative title to 'External Verifier'

Real Work: where the provision of the product or service by the Learner, if not carried out, would require an organisation to employ someone else to do it.

Realistic Working Environment (RWE): an environment within which Learners are producing performance evidence subject to the following conditions:

- real work pressures (e.g. working hours, timescales, accountability, establishing priorities)
- real work problems

- real tools to do the job (e.g. real information, industry standard equipment)
- a real client or customer (not the trainer or assessor)

RPL: the Recognition of Prior Learning- the facility for an individual to receive credit for previously acquired (and still current) competence. .

Technically & Occupationally Competent Witness: a gas operative who holds a current certificate of competence in the area of work for which they are providing witness testimony (these operatives must be a 'member of a class of persons' as outlined in Regulation 3(3) of the Gas Safety (Installation and Use) Regulations).