



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

**Regulation of Gas Installers with respect to Safety
Definition for the Scope of Gas Works
With regard to Liquefied Petroleum Gas (LPG)**

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CER – Information Page

Under the Electricity Regulation Act 1999, (the ‘1999 Act’)¹, the CER has the responsibility to regulate the activities of natural gas undertakings and natural gas installers with respect to safety. The CER set out its approach to the regulation of natural gas undertakings and natural gas installers in the decision papers, “*A Natural Gas Safety Regulatory Framework for Ireland*” (ref. CER/07/172) and “*Vision for the Regulation of Gas Installers with Respect to Safety*” (ref. CER/07/225). The responsibility of the CER, under the 1999 Act² was extended to similarly regulate the activities of LPG installers with respect to safety in June 2010.

Section 9(G) of the 1999 Act also provides that the CER “*may by regulations designate a class or classes of works to be gas works.*” In this instance ‘works’ mean work which is related to the installation, removal, repair or replacement of a natural gas fitting or a LPG fitting. These regulations set out the classes of work that can only be completed by a Registered Gas Installer. Once in place it is illegal for any person who is not a Registered Gas Installer to undertake these classes of work subject to certain limited exceptions³. In essence by designating a class of *gas works*, the CER will set the scope of the system for regulation of gas installers with respect to safety.

The CER published its final decision paper on the Scope of Gas Works with regard to natural gas (ref. CER/09/083) in May 2009. This decision was subsequently translated into regulations (S.I. No. 225 of 2009⁴), as required under the 1999 Act, on the 26th June 2009. S.I. No. 225 of 2009 outlines those *gas works* on natural gas fittings designed to be used in a domestic setting that can only be carried out by a Registered Gas Installer.

The CER designated the Register of Gas Installers Ireland (RGII) as the Gas Safety Supervisory Body (GSSB) in December 2008. The role of the GSSB is to regulate the work of gas installers in Ireland, with respect to safety, on behalf of the CER. RGII commenced registering natural gas installers in January 2009 with the regulatory system becoming fully operational in June 2009 in line with the commencement of S.I. No. 225 of 2009.

The CER now intends to extend the scope of *gas works* to include *gas works* relating to LPG, thus extending the regulatory regime to include the LPG industry.

The purpose of this consultation paper is to elicit industry and public comment on the CER’s proposed definition of Domestic, Commercial and Industrial LPG customers, the CER’s analysis of the policy considerations with regard LPG and the CER’s proposed scope of *gas works* relating to LPG. This consultation will be followed by a decision paper on the matter of *gas works* for LPG and this will be subsequently translated into regulations as required under the 1999 Act. This will take place before the end of 2011.

¹ As amended by Sections 12 and 13 of the Energy (Miscellaneous Provisions) Act 2006.

² As amended by the Energy (Biofuel Obligation and Miscellaneous Provisions) Act 2010.

³ These certain limited exemptions are for system operators, gas emergency officers and gas safety officers carrying out their functions.

⁴ Electricity Regulation Act 1999 (Gas Works) Regulations 2009 - S.I. No. 225 of 2009

Target Audience:

This consultation paper is aimed specifically at the LPG installer industry, the gas industry and the general public.

Related Documents:

- [A Natural Gas Safety Regulatory Framework for Ireland \(ref. CER/07/172\);](#)
- [Vision for the Regulation of Gas Installers with Respect to Safety \(ref. CER/07/225\);](#)
- [Launch of Process for the Designation of the Gas Safety Supervisory Body;](#)
- [CER – HSA Memorandum of Understanding \(ref. CER/08/104\);](#)
- [Economic Regulation of the Gas Safety Supervisory Body and any Electrical Safety Supervisory Bodies to be designated by the CER \(ref. CER/08/108\);](#)
- [Criteria Document for the Regulation of Gas Installers with respect to safety \(ref. CER/08/130\);](#)
- [Safety Regulation of the Liquefied Petroleum Gas Industry in Ireland – Policy Paper \(ref. CER/09/082\);](#)
- [Gas Works Final Decision Paper \(ref. CER/09083\);](#)
- [S.I. No. 225 of 2009: Gas Works Regulations 2009 and related guidance notes\);](#)
- I.S. EN 1949, Specification for the Installation of LPG Systems for Habitation Purposes in Leisure Accommodation Vehicles and in Other Vehicles;
- I.S. EN ISO 10239, Small Craft- Liquefied Petroleum Gas (LPG) Systems;
- Gas Appliance Directive (G.A.D.) 2009/142/EC of The European Parliament and of The Council of 30 November 2009 relating to appliances burning gaseous fuels (codified version).

Responses to this consultation should be returned by email, post or fax and marked for the attention of **Tara Scully** at:

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The CER intends to publish all submissions received. Respondents who do not wish part of their submission to be published should mark this area clearly and separately or enclose it in an Appendix, stating the rationale for not publishing this part of their comments.

Executive Summary

Under the Electricity Regulation Act 1999, (the '1999 Act')⁵, the CER has the responsibility to regulate the activities of natural gas undertakings and natural gas installers with respect to safety. The CER set out its approach to the regulation of natural gas undertakings and natural gas installers in the decision papers, "*A Natural Gas Safety Regulatory Framework for Ireland*" (ref. CER/07/172) and "*Vision for the Regulation of Gas Installers with Respect to Safety*" (ref. CER/07/225). The responsibility of the CER, under the 1999 Act,⁶ was extended to similarly regulate the activities of LPG installers with respect to safety in June 2010.

Section 9(G) of the 1999 Act also provides that the CER "*may by regulations designate a class or classes of works to be gas works.*" In this instance 'works' mean work which is related to the installation, removal, repair or replacement of a natural gas fitting or a LPG fitting. These regulations set out the classes of work that can only be completed by a Registered Gas Installer. Once in place it will be illegal for any person who is not a Registered Gas Installer to undertake these classes of work subject to certain limited exceptions. In essence by designating classes of *gas works*, the CER is setting the scope of the system for regulation of gas installers with respect to safety.

The CER published its final decision paper on the Scope of Gas Works with regard to natural gas (ref. CER/09/083) in May 2009. This decision was subsequently translated into regulations (S.I. No. 225 of 2009⁷), as required under the 1999 Act, on the 26th June 2009. S.I. No. 225 of 2009 outlines those *gas works* on natural gas fittings that can only be carried out by a Registered Gas Installer. The CER designated the Register of Gas Installers Ireland (RGII) as the Gas Safety Supervisory Body (GSSB) in December 2008. The role of the GSSB is to regulate the work of gas installers in Ireland, with respect to safety, on behalf of the CER. RGII commenced registering natural gas installers in January 2009 with the regulatory system becoming fully operational in June 2009 in line with the commencement of S.I. No. 225 of 2009.

The CER now intends to extend the scope of *gas works* to include *gas works* relating to LPG. In this consultation paper, the CER presents proposals on the definition for the scope of *gas works* relating to LPG including:

1. Implementing classes of *gas works* for those works on LPG fittings in the domestic customer category before the end of 2011(See Section 5.1).
2. Extending the regulatory model and the definition of *gas works* to include those works on LPG fittings used or designed to be used by commercial LPG customers in the medium term (post 2011) when certain conditions exist (See Section 5.2).
3. Not extending the regulatory model and the definition of *gas works* to include those works on LPG fittings used or designed to be used by Industrial LPG customers at this stage (See Section 5.3).

⁵ As amended by Sections 12 and 13 of the Energy (Miscellaneous Provisions) Act 2006.

⁶ As amended by the Energy (Biofuel Obligation and Miscellaneous Provisions) Act 2010.

⁷ Electricity Regulation Act 1999 (Gas Works) Regulations 2009 - S.I. No. 225 of 2009

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1.0 Introduction

1.1 The Commission for Energy Regulation

The Commission for Energy Regulation (the ‘CER’) is the independent body responsible for overseeing the regulation of Ireland's electricity and gas sectors. The CER was initially established and granted regulatory powers over the electricity market under the *Electricity Regulation Act 1999*. The enactment of the *Gas (Interim) (Regulation) Act, 2002* expanded the CER's jurisdiction to include regulation of the natural gas market, while the *Energy (Miscellaneous Provisions) Act 2006*, granted the CER additional powers in relation to gas and electrical safety. The *Electricity Regulation Amendment (SEM) Act 2007* outlined the CER's functions in relation to the Single Electricity Market (SEM) for the island of Ireland. This market is regulated by the CER and the Northern Ireland Authority for Utility Regulation (NIAUR). Most recently the CER's remit has been extended, by the *Petroleum (Exploration and Extraction) Safety Act 2010*, to include the safety regulation of upstream petroleum activities and by the *Energy (Biofuel Obligation and Miscellaneous Provisions) Act 2010*, to include the regulation of LPG installers with respect to safety. The Commission's safety remit is expected to be further extended in 2011, to include the safety regulation of LPG distribution networks, LPG appliance-related incident reporting and the promotion of LPG safety by the CER, with the enactment of the *Energy (Miscellaneous Provisions) Act 2010*. The CER is working to ensure that consumers benefit from regulation and the introduction of competition in the energy sector.

1.2 Relevant Legislation

The CER was initially established under the *Electricity Regulation Act 1999*, (the ‘1999 Act’). The 1999 Act is the principle legislation in the context of CER's responsibilities with regard to the safety regulation of gas installers. However, it has been amended by the *Energy (Miscellaneous Provisions) Act 2006* (the ‘2006 Act’) and the *Energy (Biofuel Obligation and Miscellaneous Provisions) Act 2010* (the ‘2010 Act’) to extend the CER's functions in the areas of safety. Specifically;

- The 2006 Act granted the CER additional powers in relation to gas and electricity safety. In particular the responsibility to regulate the activities of natural gas undertakings and natural gas installers with respect to safety;
- The 2010 Act further extends the CER's statutory function to regulate the activities of LPG installers with respect to safety.

Hereafter any reference made to the ‘1999 Act’ includes amendments made by the ‘2006 Act’ and the ‘2010 Act’.

1.3 Purpose of this paper

The purpose of this paper is to seek the views of the general public and industry stakeholders with regard to the CER's proposed definition of Domestic, Commercial and Industrial LPG customers, the CER's analysis of the policy considerations with regard to LPG and the CER's proposed definition for the scope of *gas works* relating to LPG. In order to make an informed and impartial decision on this topic, the CER wishes to obtain comments from members of the general public, gas installers and all other interested parties, particularly those in the LPG industry. The CER commits to considering all views equally and affording each respondent the opportunity to clarify any issue raised in this paper.

1.4 Background Information

Under the provisions of the 1999 Act, the CER has the responsibility to regulate the activities of natural gas undertakings, natural gas installers and LPG installers with respect to safety.

The CER published its decision paper "*A Natural Gas Safety Regulatory Framework for Ireland*" (ref. CER/07/172) in October 2007, which sets out the CER's approach to the regulation of natural gas undertakings which includes gas storage, liquefied natural gas (LNG), transmission, distribution and shipper and supplier businesses operating within Ireland. In December 2007, the CER also published its decision paper "*Vision for the Regulation of Gas Installers with Respect to Safety*" (ref. CER/07/225), which sets out the CER's high level approach to the regulation of natural gas installers with respect to safety within the Framework. In particular, the "*Vision for the Regulation of Gas Installers with Respect to Safety*" decision paper sets out the CER's approach to achieving its safety responsibilities with respect to gas installers through:

"Designating categories of gas works which may only be undertaken by individually registered installers who are competent, operating to the appropriate standard, using the appropriate materials, who will certify their work as safe and will be subject to ongoing regulation and inspection by the Gas Safety Supervisory Body".

In this instance 'works' mean work which is related to the installation, removal, repair or replacement of a natural gas fitting. The CER designated a class of works to be *gas works* via regulations in June 2009. This regulation set out those *gas works* on natural gas fittings that can only be completed by a Registered Gas Installer. It is illegal for any person who is not a registered installer to undertake these classes of *gas works* subject to certain limited exceptions.⁸

⁸ There are certain limited exemptions for system operators, gas emergency officers and gas safety officers carrying out their functions.

The CER designated the Register of Gas Installers Ireland (RGII) as the Gas Safety Supervisory Body (GSSB) in December 2008. The role of the GSSB is to regulate the work of gas installers in Ireland, with respect to safety. RGII commenced registering natural gas installers in January 2009 with the regulatory system becoming fully operational in June 2009. Installers are required to meet certain entry requirements such as: specific training criteria, hold appropriate commercial insurance, pay the appropriate membership fee and sign and accept the Rules of Registration. There are currently over 2,700 Registered Natural Gas Installers (RGIs). All RGIs are subject to ongoing inspection by RGII inspectors.

The CER's Vision document outlined the CER's intention to extend the regulatory scheme to incorporate the regulation of LPG installers following the establishment of the system for the regulation of natural gas installers. In order to extend the regulatory scheme to include the LPG industry the CER must now designate a class or classes of works to be *gas works* for LPG via regulations. These regulations will set out those *gas works* relating to LPG that can only be completed by a Registered Gas Installer. Once in place it will be illegal for any person who is not a Registered Gas Installer to undertake these classes of work subject to certain limited exceptions.⁹ In essence, by designating the classes of *gas works* relating to LPG, the CER will set the scope of the regulatory system for LPG installers.

To assist the CER in defining categories of *gas works*, some respondents to the Gas Works consultation regarding natural gas (ref. CER/09/083) provided their view on the appropriate classes of works that should be designated as *gas works*, including those relating to LPG. While the CER has considered these responses in developing the proposals outlined in this consultation paper, all interested parties are encouraged to also respond to this consultation process. Responses to the CER's decision on the Scope of Gas Works regarding Natural Gas can be found on www.cer.ie.

This consultation paper sets out the CER's proposed Definition for the Scope of *Gas Works* with regard to LPG.

1.5 Structure of this paper

This paper is structured as follows:

- Section 2:** Describes the legislative context and provisions which underpin the designation of *gas works*.
- Section 3:** Outlines the high level potential options for the broad scope of *gas works for LPG*.

⁹ There are certain limited exemptions for system operators, gas emergency officers and gas safety officers carrying out their functions.

- Section 4:** Provides an overview of the policy considerations with respect to any decision on the appropriate scope of gas *works* for LPG.
- Section 5:** Presents the CER’s proposals with respect to the definition of *gas works* and invites comment from the public and industry.
- Section 6:** Sets out the next steps and the CER’s timetable for this consultation and the subsequent decision.

1.6 Scope of this paper

The scope of this consultation is strictly limited to the CER’s high level proposals for the broad scope of *gas works* with respect to LPG.

1.7 Responding to this paper

Comments should be sent to Tara Scully, Gas Safety Supervision Analyst, no later than 07 March 2011. Comments in electronic format to tscully@cer.ie are preferable; however comments may also be posted or faxed to the CER at the following address:

The Commission for Energy Regulation,

The Exchange,

Belgard Square North,

Tallaght,

Dublin 24.

Fax: 01 4000850

The CER intends to publish all submissions received. Respondents who do not wish part of their submission to be published should mark this area clearly and separately or enclose it in an Appendix, stating the rationale for not publishing this part of their comments.

2.0 Consideration of Legislative Context & Provisions

2.1 Introduction

The 1999 Act is the primary piece of legislation in the context of the CER's responsibilities with regard to the regulation of gas installers with respect to safety. The provisions relating to *gas works* are outlined in Section 2.2 of this paper. There are also a number of other Acts and Regulations which ought to be considered when determining the appropriate definition for the scope of *gas works* relating to LPG. These are discussed in Section 2.3.

2.2 The Electricity Regulation Act 1999 (the '1999 Act')

2.2.1 High level Provisions

Section 9G of the 1999 Act¹⁰, provides for –

- (1) *The CER, having consulted with such persons as it considers appropriate, and with the consent of the Minister, may by regulations designate a class or classes of works to be gas works.*
- (2) *In this section 'works' means work which is related to the installation, removal, repair or replacement of a natural gas fitting or LPG fitting.*

Section 2(1) of the 1999 Act¹¹, defines a natural gas fitting as:

Any appliance, apparatus or other thing including associated pipework and flueing which is used or designed to be used by –

- (a) a domestic customer, or*
- (b) such class or classes of industrial customer or commercial customers as the CER may specify from time to time,*

in connection with the consumption or use of natural gas whether the appliance, apparatus or thing is the property of a natural gas undertaking or otherwise.

Section 2(1) of the 1999 Act¹², defines a LPG fitting as:

¹⁰ Inserted by Section 13 of the '2006 Act'.

¹¹ Inserted by Section 11 of the '2006 Act'.

¹² Inserted by the Energy (Biofuel Obligation and Miscellaneous Provisions) Act 2010.

Any non-portable appliance, apparatus or other thing including associated pipework and flueing which is used or designed to be used by –

(a) a domestic customer, or

(b) such class or classes of industrial customer or commercial customers as the CER may specify from time to time,

in connection with the consumption or use of LPG.

Once *gas works* are designated by the CER, the 1999 Act makes it illegal for any person other than a Registered Gas Installer to carry out such works.¹³ In such instances a person who is guilty of this offence will be liable to a fine of up to €5,000 and/or a prison term of up to six months upon summary conviction or conviction on indictment which can have an associated fine of up to €15,000 and/or a prison sentence of up to three years.

The above provisions have a number of implications. Firstly, from **a legal perspective**, the definition of *gas works* relates at a minimum, to a LPG fitting which is used or designed to be used by a domestic customer or, if so decided by the CER, commercial and industrial customers. Therefore in determining the scope of *gas works*, a definition of Domestic, Commercial and Industrial LPG customers is required. Proposals in this regard are set out in Section 3.2.

Further to the definition of the broad classes of customer categories, as outlined in Section 3.2, any regulations with respect to *gas works* must include works on LPG fittings used or designed to be used by domestic customers. However the definition of a LPG fitting gives a degree of discretion in whether the scope of *gas works* should include works on LPG fittings used or designed to be used by commercial and industrial customers. This represented the key policy decision for the CER when defining the scope of *gas works* for the natural gas sector and is, in a similar fashion, the key policy decision for consideration in this paper.

The CER decision on the ***Scope of Gas Works for Natural Gas*** outlined three policy decisions:

Option A: Minimum Scope of Gas Works with respect to Domestic natural gas customers. The CER Implemented a class of *gas works* for those works on natural gas fittings in the domestic customer category on the 26th June 2009. Domestic *gas works* include those works on natural gas fittings used or designed to be used by domestic customers including where they are used by both commercial and industrial customers.

¹³ There are certain limited exemptions for system operators, gas emergency officers and gas safety officers carrying out their functions.

Option B: Intermediate Scope of Gas Works with respect to Commercial natural gas customers. The CER will introduce further regulations which will prohibit persons who are not registered from undertaking “commercial” gas work when certain conditions are met (See Section 5.2). Commercial *gas works* will include those works on natural gas fittings used or designed to be used by commercial gas customers including where they are used by industrial customers, in the medium term (post 2010).

Option C: Maximum Scope of Gas Works with respect to Industrial natural gas customers. The CER will not extend the regulatory model and the definition of *gas works* to include those works on natural gas fittings designed to be used by industrial gas customers at this stage.

It is within the context of these decisions that the CER’s proposals for *gas works* relating to LPG should be considered.

2.2.2 Specific Provisions

The 1999 Act also contains specific requirements related to *gas works* including:

- *gas work* must be carried out in accordance with the safety requirements specified by the CER,
- gas installers must issue an appropriate completion certificate to the customer for any *gas work* carried out.
- the CER is required to “*specify a form of completion certificate*” to be used by gas installers in the above instance.

The above provisions reinforce the link between the customer, the gas installer and the regulatory system, as illustrated in Diagram 1 below.

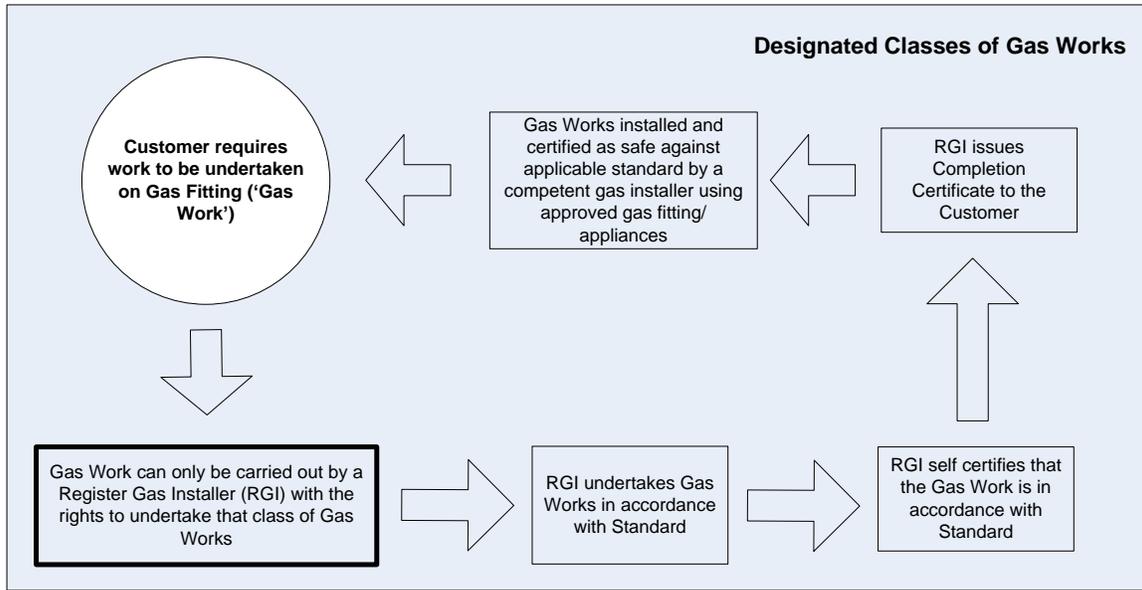


Diagram 1: Operation of the Regulatory System

2.3 Other Relevant Legislation

In addition to the 1999 Act, the *Safety, Health and Welfare at Work Act 2005* (the '2005 SHWAW Act') and regulations made under that Act are also relevant to the definition of *gas works particularly with respect to gas installers operating in a non-domestic environment*. The 2005 SHWAW Act applies to safety in the workplace generally and includes a number of relevant general protective and preventative provisions such as hazard identification, risk assessment and the preparation of safety statements. Furthermore under Section 16 of the 2005 SHWAW Act a person who supplies any article for use at work, or any substance, must ensure that, so far as is reasonably practicable, the article or substance:

- is safe and without risk to health when used by a person at a place of work;
- is given only to those who have been provided with adequate information, and revisions of such information as may become available, about the use of the article or substance, and of any conditions relating to either;
- complies with relevant statutory provisions; and
- undergoes and has undergone appropriate testing to ensure its safety.

This duty falls on those who manufacture, design, import or supply any article for use in a place of work, and on those who erect, assemble or install articles for use at a place of work. There are also duties regarding testing, research and examination prior to use, and to disposal and dismantling of equipment after use.

The *Safety, Health and Welfare at Work (Construction) Regulations 2006* are also relevant “to the installation, commissioning, maintenance, repair or removal ofgas systems, or similar services which are normally fixed within or to a structure”. Section 17 of the Regulations state:

(1) A person who commissions or procures a project for construction work shall appoint in writing a competent person or persons for the purpose of ensuring, so far as is reasonably practicable, that the project—

(a) is designed and is capable of being constructed to be safe and without risk to health,

(b) is constructed to be safe and without risk to health,

(c) can be maintained safely and without risk to health during subsequent use, and

(d) complies in all respects, as appropriate, with the relevant statutory provisions.

(2) A person who designs a project for construction work shall ensure, so far as is reasonably practicable, that the project—

(a) is designed and is capable of being constructed to be safe and without risk to health,

(b) can be maintained safely and without risk to health during use, and

(c) complies in all respects, as appropriate, with the relevant statutory provisions.

(3) A person who carries out construction work shall ensure, so far as is reasonably practicable, that it is constructed to be safe and without risk to health and that it complies in all respects, as appropriate, with the relevant statutory provisions.

(4) For the purposes of this section, ‘project’ means any development which includes or is intended to include construction work.

Therefore the 2005 SHWAW Act and the associated Regulations place certain responsibilities upon employers with respect to the installation, commissioning, maintenance, repair or removal of LPG fittings currently. As such this must be considered by the CER when determining whether it is appropriate to extend the scope

of *gas works* to include those LPG fittings used or designed to be used by commercial and/or industrial customers. This is discussed further in Section 4.2.

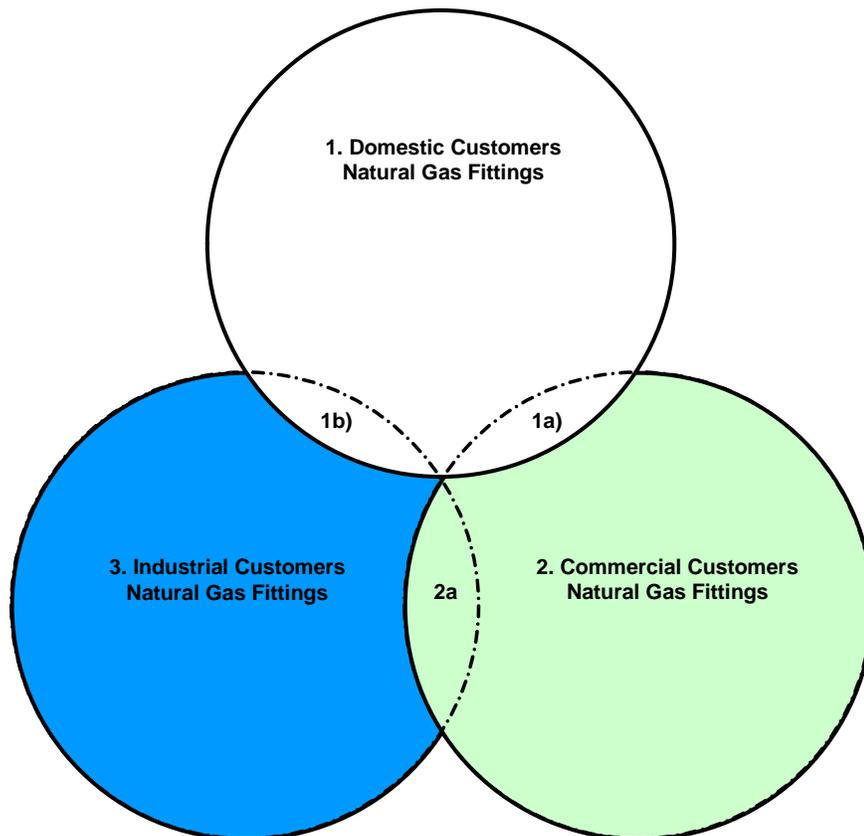
3.0 Potential Options for the Scope of Gas Works relating to LPG and Classes within that Scope

3.1 High Level Overview

As set out in Section 2.2, **the scope of gas works** relates to the installation, removal, repair or replacement of a natural gas fitting or LPG fitting which is used or designed to be used by a domestic customer, or if so decided by the CER, commercial and industrial customers.

The CER’s decision paper on the Definition for the Scope of Gas Works (ref. CER/09/083) related to natural gas only and did not extend to LPG fittings. This paper outlined the CER’s decision to implement *Option A: Minimum Scope of Gas Works* at full commencement of the regulatory system on 26th June 2009. As illustrated in Diagram 2 below the current minimum scope of *gas works* relates to the installation, removal, repair or replacement of natural gas fittings used or designed to be used by domestic customers. This includes those natural gas fittings including domestic appliances designed to be used by domestic customers where they are used by both commercial and industrial customers.

Diagram 2: Current Scope of Gas Works



Key	
1. Natural gas fittings designed for use by domestic gas customers only	2. Natural gas fittings designed to be used by commercial customers only
1a) Natural gas fittings designed to be used by domestic gas customers but installed in commercial premises	2a) Natural gas fittings designed to be used by commercial customers but installed in industrial premises
1b) Natural gas fittings designed to be used by domestic gas customers but installed in Industrial premises	3. Natural gas fittings designed to be used by industrial customers only
Scope of Regulatory Model	Includes For
A. Minimum Scope of Gas Works	1., 1 a), 1 b)
B. Intermediate Scope of Works	1., 1 a), 1 b), 2. and 2 a)
C. Maximum Scope of Gas Works	1., 1 a), 1 b), 2. , 2 a) and 3.

The CER’s proposals for the scope of *gas works* relating to LPG should be considered within this context.

At a high level, the **minimum scope of gas works**¹⁴ must also include work related to the installation, removal, repair or replacement of LPG fittings used or designed to be used by domestic customers. This would include those LPG fittings (which include domestic appliances) designed to be used by domestic customers where they are used by both commercial and industrial customers.

The **potential maximum scope of gas works**¹⁵ would also include all works related to the installation, removal, repair or replacement of:

- all LPG fittings used or designed to be used by domestic customers;
- all LPG fittings used or designed to be used by commercial customers;
- all LPG fittings used or designed to be used by industrial customers;
- LPG fittings designed to be used by domestic customers which are used by both commercial and industrial customers;
- LPG fittings designed to be used by commercial customers which are used by industrial customers;

Between the minimum and potential maximum scope of gas works, is an **intermediate scope of gas works**¹⁶ which would also include all works identified in the potential maximum scope of gas works above excluding:

- all LPG fittings used or designed to be used by industrial customers.

¹⁴ This is referred to as Option A: Minimum Scope of Gas Works throughout this paper

¹⁵ This is referred to as Option C: Maximum Scope of Gas Works throughout this paper

¹⁶ This is referred to as Option B: Intermediate Scope of Gas Works throughout this paper

These three potential scope options are illustrated in Diagram 3 below:

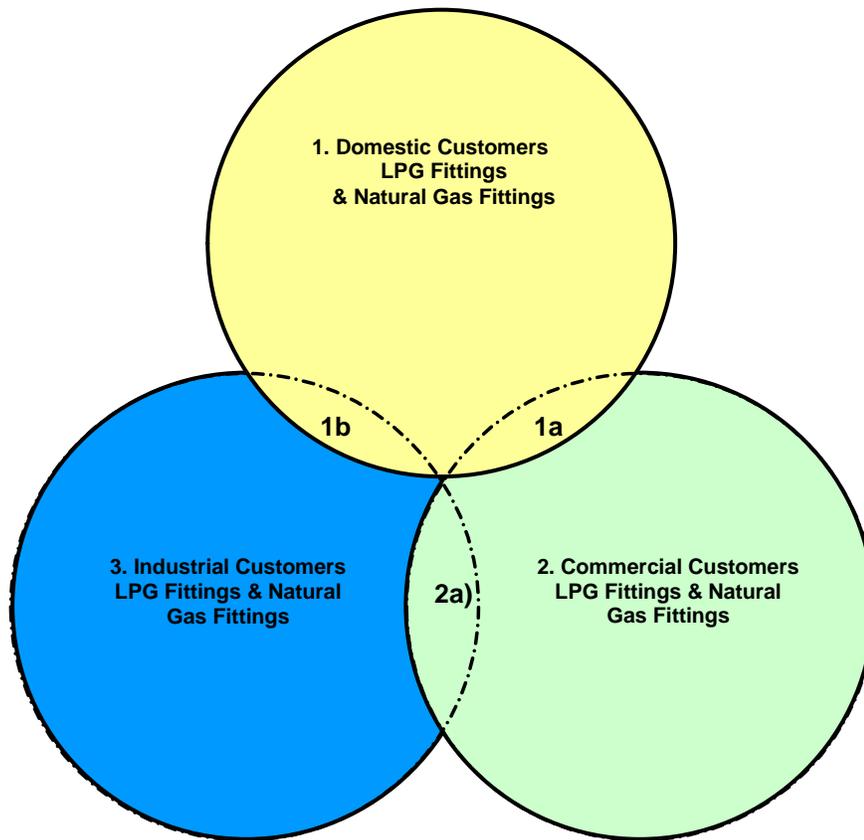


Diagram 3: Potential Scope of Gas Works

Key	
1. Natural gas fittings and LPG fittings designed for use by domestic gas customers only	2. Natural gas fittings and LPG fittings designed to be used by commercial customers only
1a) Natural gas fittings and LPG fittings designed to be used by domestic gas customers but installed in commercial premises	2a) Natural gas fittings and LPG fittings designed to be used by commercial customers but installed in industrial premises
1b) Natural gas fittings and LPG fittings designed to be used by domestic gas customers but installed in Industrial premises	3. Natural gas fittings and LPG fittings designed to be used by industrial customers only
Scope of Regulatory Model	Includes For
A. Minimum Scope of Gas Works	1., 1 a), 1 b)
B. Intermediate Scope of Works	1., 1 a), 1 b), 2. and 2 a)
C. Maximum Scope of Gas Works	1., 1 a), 1 b), 2. , 2 a) and 3.

Based on the current scope of gas works for natural gas, the responses received to the consultation on the scope of gas works for natural gas (ref. CER/09/032 & CER08/142) and the definitions provided in the Decision on the Scope of gas works for Natural Gas (ref. CER/09/083), the following section provides the proposed high level description/definition for Domestic, Commercial and Industrial LPG customers. Where possible, the definitions include the approximate numbers in each of the respective types of customers and examples of LPG fittings used or designed to be used by the above customers.

3.2 Definitions for Domestic, Commercial and Industrial LPG Customers

It should be noted that it is extremely difficult to define or categorise classes of domestic, commercial and industrial customers succinctly as there will always be anomalous situations whereby a particular end-user may 'fall between' two categories- e.g. a take-away restaurant using a commercial gas cooking range that is situated in a domestic property. The following proposed definitions provide a generic description of the various customer categories and take into account suggested amendments arising out of the publication of the decision paper for the Scope of Gas Works relating to natural gas. Following publication of the final decision on *gas works relating to LPG* and corresponding regulations the CER will publish guidelines to assist persons in identifying those *gas works* relating to LPG which can only be carried out by a Registered Gas Installer.

3.2.1 Domestic LPG Customers

'Domestic LPG customers' are defined as those end users who use LPG on a permanent, temporary or seasonal basis, for residential purposes such as space heating, cooking and hot water, utilising standardised and gas burning appliances approved under the requirements of the G.A.D¹⁷. Domestic LPG customers use LPG for residential purposes in fixed and mobile residential premises, as follows:

3.2.1.1 Domestic LPG Customers (fixed dwellings)

There are approximately 20,000 Domestic LPG customers within Ireland whose supply is via an individual bulk tank. An additional 12,500 domestic customers are supplied via central storage/distribution network systems.

In addition to individual bulk and central storage/distributed network supplied LPG, there is a very significant market in LPG cylinders used by domestic customers for non-primary heating purposes such as spot heating (e.g.

¹⁷ Gas Appliance Directive 2009/142/EC

cabinet heaters), which is very common, and leisure activities involving the use of barbecues and patio heaters. These activities are recognised as being outside the scope of the regulations, since they involve the use of **portable** LPG appliances which are excluded from the legal definition of a LPG fitting. However, the use of LPG cylinders connected to **non-portable** domestic appliances is deemed to be within the scope of the regulations (e.g. an installed gas cooker connected to a LPG cylinder).

LPG supplied in cylinders accounts for approximately 24% of the total usage (all customers) in Ireland and it is estimated that cylinders are used in one form or another by approximately half of the country's population.

3.2.1.2 Domestic LPG Customers (mobile dwellings)

It is recognised that there is extensive use of LPG on a permanent, temporary or seasonal basis, for residential purposes, such as cooking, space heating, and hot water, in privately owned, rented, and/or hired liveaboard boats (c. 60) and vessels (c.10,000) navigating the inland Irish waterways. LPG is also extensively used by domestic customers for residential purposes such as cooking, space heating, and hot water, in domestic caravans, mobile homes and Leisure Accommodation Vehicles (LAV's)¹⁸.

It is clear that the use of LPG by domestic customers for residential purposes in these types of premises falls within the scope of LPG fittings as defined by the 1999 Act:

Section 2(1) of the 1999 Act¹⁹, defines a LPG fitting as:

Any non-portable appliance, apparatus or other thing including associated pipework and flueing which is used or designed to be used by –

(a) a domestic customer, or

(b) such class or classes of industrial customer or commercial customers as the CER may specify from time to time,

in connection with the consumption or use of LPG.

In addition, the safety risks associated with the use of LPG fittings designed to be used by domestic customers are equivalent regardless of their location in 'fixed' or 'mobile' domestic dwellings. While there are a number of voluntary bodies in place that issue guidelines as regards the use of LPG in these types of accommodations, this area is unregulated from a gas safety perspective.

Given the risks associated and the safety responsibilities of the CER under the 1999 Act, the CER is obligated to include these customers within the

¹⁸ See I.S. EN 1949 for definition of LAV's

¹⁹ As inserted by the Energy (Biofuel Obligation and Miscellaneous Provisions) Act 2010.

definition of Domestic LPG Customers and hence within the Scope of Gas Works for LPG.

The CER is particularly interested in the comments of industry and other interested parties in this regard.

In the domestic LPG customer category, the classes of *gas works* would relate to all works on LPG fittings used or designed to be used by domestic customers such as LPG cookers and boilers, including where they are used by both commercial and industrial customers as outlined in Section 2.2.1.

3.2.2 Commercial LPG Customers

‘Commercial LPG customers’ are defined as those end users who use LPG for commercial business and institutional purposes. Examples of these businesses include leisure and hotel facilities, restaurants, warehousing, office accommodation, mobile catering and hospitals utilising appliances for purposes such as catering and heating but excluding industrial processes.

3.2.2.1 Commercial LPG Customers (fixed premises)

There are approximately 10,000 Commercial LPG customers in Ireland supplied via individual bulk tank. In addition, there are approximately 1,500 commercial customers supplied via central storage/distribution network systems, with others being supplied via LPG cylinders used for non-primary heating purposes such as spot heating e.g. mobile blown-air heaters and leisure activities involving the use of barbecues and patio heaters. As mentioned above with regard to domestic customers, the use of LPG in **portable** commercial appliances by commercial customers is also recognised as being outside of the scope of the regulations. However, the use of LPG cylinders connected to **non-portable** commercial appliances is deemed to be within the scope of the regulations.

3.2.2.2 Commercial LPG Customers (mobile premises)

It is recognised that there is also widespread use of LPG by commercial customers in mobile commercial premises. Examples include floating restaurants, buses converted for catering purposes and mobile fish and chip shops. It is clear that the use of LPG for commercial purposes in these types of premises falls within the scope of LPG fittings as defined by the 1999 Act (See section 3.2.1.2 above).

In addition, the safety risks associated with the use of LPG fittings designed to be used by commercial customers are equivalent regardless of their location either in a ‘fixed’ or ‘mobile’ commercial premises. It is the intention of the CER that these Commercial LPG customers will also

come within the scope of the regulations, in the medium term (See Section 5.2 for proposals in this regard).

The CER is particularly interested in the comments of industry and other interested parties in this regard.

In the commercial LPG customer category the classes of *gas works* would relate to all works on LPG fittings and associated flueing such as LPG catering equipment, space and water heating appliances which are used or designed to be used by these Commercial LPG customers, including where they are used by industrial customers.

NOTE: Domestic classes of *gas works* will apply in situations where domestic type appliances are installed in the premises of non-domestic (commercial and industrial) LPG customers. Examples may include very small-scale businesses such as dentists, doctors, solicitors, accountants, hair salons etc. who carry out their business at residential-type properties²⁰.

3.2.3 Industrial LPG Customers

‘Industrial LPG customers’ are defined as those end users who use LPG for primarily industrial business purposes. Examples of these purposes include chemical processing, glass-making, CHP, construction industry products, etc. utilising purpose designed industrial gas-burning equipment and processes. There are approximately 1,000 of these industrial customers within Ireland.

In the industrial customer category the relevant classes of *gas works* would relate to work on LPG fittings used or designed to be used within the industrial sector. For example in the industrial customer category the class of gas work would relate to all works on LPG appliances and associated LPG pipework and flueing such as LPG catering equipment, space and water heating appliances. In addition there will be specifically designed plant, purpose built for production purposes. In these cases the installation, commissioning and servicing work is undertaken by bespoke trained operatives generally associated with the appliance manufacturer. This category of customer may be supplied by individual bulk tank, central storage/distributed system or cylinders.

²⁰ In these properties only appliances designed for domestic use would be appropriate for installation into this type of property.

3.3 The Policy Decision on the Scope of Gas Works

As discussed in Sections 2.2.1 and 3.1, the CER is clearly obligated to implement '*Option A: Minimum Scope of Gas Works*' with respect to Domestic LPG customers as illustrated in Diagram 3. Therefore the *gas works* regulations must include work related to the installation, removal, repair or replacement of LPG fittings used or designed to be used by Domestic LPG customers described in Section 3.2.1. It also includes work on those LPG fittings designed to be used by Domestic LPG customers being used by both Commercial and Industrial LPG customers (as described in Section 3.2.2 and 3.2.3). It is clear from the 1999 Act that capturing such work under the regulatory system represents the primary public policy intent of the legislation.

However, with a view to being consistent with the position taken with respect to natural gas and as outlined in Section 3.1, the CER must make a policy decision whether or not it is appropriate to extend the scope of *gas works* to include '*Option B: Intermediate Scope of Gas Works*' with respect to Commercial LPG customers, or further still, to include '*Option C: Maximum Scope of Gas Works*' with respect to Industrial LPG Customers.

The CER intends to take this policy decision with due regard to the:

- extent of safety risks associated with the utilisation of LPG by Commercial and Industrial gas customers;
- existing legislative provisions governing safety risks in such environments;
- suitability of regulatory model provided for in the 1999 Act, in respect to the regulation of LPG installers in the commercial and industrial *gas works* area;
- international best practice and experience in regard to the regulation of *gas works* in such environments; and the
- comments received to this consultation paper.

The CER outlines below (Section 4) its view of the safety risks associated with the utilisation of LPG and its proposal (Section 5) on the scope of *gas works* with respect to the LPG customer categories set out in Section 3.0.

4.0 Policy Considerations with Respect to the Scope of Gas Works relating to LPG

4.1 Overview

In order to assist stakeholders in responding to this consultation and the proposals outlined in Section 5, the CER now sets out its present views on some of the decision criteria identified in Section 3.3, specifically:

- the extent of safety risks associated with the utilisation of LPG by Domestic, Commercial and Industrial LPG Customers (Section 4.2)
- the ability of existing legislative provisions in managing the safety risks in such environments (Section 4.3); and
- the suitability of regulatory model provided for in the 1999 Act in respect to the regulation of LPG installers in the commercial and industrial *gas works* area (Section 4.4);

The CER is particularly interested in respondent's views on its analysis in the above areas.

4.2 Safety Risks Associated with the Utilisation of Liquefied Petroleum Gas

4.2.1 Overview

During the Scope of Gas Works for natural gas consultation process, the CER identified "*Ensuring the safe utilisation of gas downstream of the meter, within all gas facilities and premises (domestic and non-domestic)*" as one of the 5 principal aspects of gas safety risks that need to be managed and controlled by the CER through its Natural Gas Safety Regulatory Framework. Similarly, this risk needs to be managed and controlled in the context of LPG.

There are 3 broad safety risks associated with the utilisation of gas:

- The competence of gas installers;
- The use of approved gas fittings and appliances and their installation, service, repair and removal; and

- The levels of gas safety awareness amongst end use customers and the general public.

Gas customers and the public at large should have a level of gas safety awareness necessary to ensure that they understand the potential dangers of not employing competent gas installers and not servicing gas-burning appliances regularly.

The potential outcomes of improper gas installation and maintenance include:

- gas escapes inside the property resulting in fire and/or explosion; and
- inadequate installation servicing / commissioning, flueing, ventilation, leading to incomplete combustion resulting in;
 - the potential for carbon monoxide poisoning;
 - the potential for ill health due to inadequate clear air environments for both the general public and workers using gas appliances.

4.2.2 Safety Risks Associated with Domestic LPG Customers

The main areas of concern with Domestic LPG customers for safety issues centre on the installation and use of appliances, in particular:

- Correct installation of appliances only carried out by competent individuals;
- Regular appliance maintenance in line with manufacturer's instructions;
- Vigilance and implementing appropriate actions when suspicious of a gas smell, which could be a smell of gas or fumes from an appliance;
- Understanding the safety related issues when using a LPG appliance, with particular reference to adequate ventilation and flues; and.
- Understanding the safety related issues when using a LPG appliance, with regard to Carbon Monoxide (CO).

4.2.3 Safety Risks Associated with Commercial LPG Customers

The main areas of concern with Commercial LPG customers for safety issues centre on the installation and use of appliances, in particular:

- Correct installation of appliances only carried out by competent individuals;
- Regular appliance maintenance in line with manufacturers' instructions and as appropriate to the operating conditions of the appliances within the building;

- Vigilance and implementing appropriate actions when suspicious of a gas smell, which could be a smell of gas or fumes from an appliance;
- Understanding the safety related issues when using a gas appliance, with particular reference to adequate ventilation and flues by both natural and mechanical methods;
- Provision of interlocked safety cut offs between mechanically powered ventilation or forced draught flues required for safe operation; and
- Maintaining a safe working environment for staff, in particular with respect to air quality, levels of Carbon Monoxide (CO) and Carbon Dioxide (CO₂).

4.2.4 Safety Risks Associated with Industrial LPG Customers

The main areas of concern with Industrial LPG customers for safety issues centre on the installation and use of appliances, In particular the following areas:

- Correct installation of appliances only carried out by competent individuals;
- Regular appliance maintenance in line with manufacturers' instructions and as appropriate to the operating conditions of the appliances within the building;
- Vigilance and implementing appropriate actions when suspicious of a gas smell, which could be a smell of gas or fumes from an appliance;
- Understanding the safety related issues when using a LPG appliance, with particular reference towards adequate ventilation and flues by both natural and mechanical methods;
- Provision of interlocked safety cut offs between mechanically powered ventilation or forced draught flues required for safe operation;
- Maintaining a safe working environment for staff, in particular with respect to air quality, levels of Carbon Monoxide (CO) and Carbon Dioxide (CO₂); and
- Strict adherence to manufactures' instruction and operating process for bespoke plant.

4.2.5 Conclusion

The safety risks identified above present a key policy issue for the CER - namely what is the best way to manage the above risks? Should the onus of responsibility be placed upon the end-user (be they industrial, commercial or domestic customers) to form the judgement upon an individual's competence to undertake such work supported by the enforcement powers provided under existing legislation? Or, should this end user discretion be removed and the entitlement to undertake such work restricted to registered individuals who have demonstrated competence in this area?

4.3 Existing legislative provisions governing safety in the commercial and industrial customer environments.

As set out in Section 2.0, the 2005 SHWAW Act and the associated Regulations currently place clear safety responsibilities upon employers with respect to the installation, commissioning, maintenance, repair or removal of LPG fittings. More specifically, it places the responsibility on the employer to satisfy him/her that the person appointed to undertake such work is a *competent person*. In instances where an employer cannot demonstrate that the person that they employed to undertake the task was “competent” they can be subject to prosecution by the Health & Safety Authority. This usually occurs *after* an incident has occurred.

The effectiveness of this system of regulation is predicated on the ability of the employer to satisfy him/ her that an individual is competent through assessing the experience, knowledge, training and qualifications of the individual with respect to undertaking the task at hand. One school of thought in this area is that the ability of the employer to form such a judgement is generally a function of the specialised nature, complexity and cost of the LPG fitting concerned, the associated safety risks related to that fitting and the general importance that fitting has to their operation. For example, it is reasonable to assume that employers in an industrial setting are more likely to have some level of understanding of the specific competency requirements for individuals to undertake work on their industrial business operations which utilise highly specialised industrial gas-burning equipment and processes. Indeed it is in the employers’ economic interest to allow only a highly competent individual to undertake work on such equipment as the costs of equipment malfunction can be high. In many instances industrial and large commercial employers engage specifically trained in-house individuals to undertake such work.

However, the ability of employers to form such a judgement regarding an individual’s competence to undertake *gas work* will change, determined by the technical knowledge the individual employer has. In the case of many of the Commercial LPG customers defined in Section 3.2, it is highly likely there is little or no technical knowledge in this area and therefore they will not have the ability to establish an installer’s level of competence to undertake such work. Similarly in the Domestic LPG customer sector, end-users are less likely to understand the need for these specific competency requirements in undertaking works on their LPG installations and appliances.

If one concurs with this analysis, it suggests that there is not a strong requirement or benefit to extend the scope of the regulatory system to include Industrial LPG customers at this stage given that it is reasonable to assume that they have the capacity and relevant information to hand to form the judgement with respect to competence. As such the 2005 SHWAW provides the relevant enforcement powers in this area. However, it is not clear that this is likely to be the case for Commercial LPG customers, and as such the registration scheme provided for under the 1999 Act could provide the mechanism through which those commercial customers can satisfy themselves that the individual has the competence to undertake such work.

4.4 The suitability of the Regulatory model in the 1999 Act to Domestic, Commercial and Industrial Customer Environments

4.4.1 Overview

The CER describes in its decision paper, *Vision for the Regulation of Gas Installers with Respect to Safety* (ref. CER/07/225), the generic regulatory model it has established to regulate gas installers with respect to safety in accordance with the 1999 Act. Essentially this involves:

“Designating categories of gas works which may only be undertaken by individually registered installers who are competent, operating to the appropriate standard, using the appropriate materials, who will certify their work as safe and will be subject to ongoing regulation and inspection by the Gas Safety Supervisory Body”.

This generic model is illustrated in Diagram 4 and broadly involves the following:

1. The CER specifies *gas works* (or classes of *gas works*) which may only be undertaken by a Registered Gas Installer;
2. In order to become registered the individual must:
 - i. Have achieved a generic qualification in a course which relates directly to the *gas works* being undertaken;
 - ii. Have their competence formally assessed against the provisions of the standard applicable with that *gas work*;
 - iii. Agree to work in accordance with the applicable standard, and the safety requirements of the regulatory system through signing the terms and conditions of membership;

In this way the CER can satisfy itself that the individually registered installer is competent in undertaking that *gas work* and commits to working to the standard appropriate to the *gas work*.

3. The customer requires a specific class of *gas works* to be carried out and requests a Registered Gas Installer to undertake it.

4. The Registered Gas Installer undertakes the work in accordance with the standard, certifies it as such and finally issues a completion certificate to the Customer.

The outcome of the application of this regulatory model is that *gas works* are installed and certified as safe against the applicable safety standard by a competent Registered Gas Installer using approved gas fittings/appliances.

This model has been in place for natural gas installers carrying out domestic *gas works*, as defined in S.I. No. 225 of 2009, since 26th June 2009.

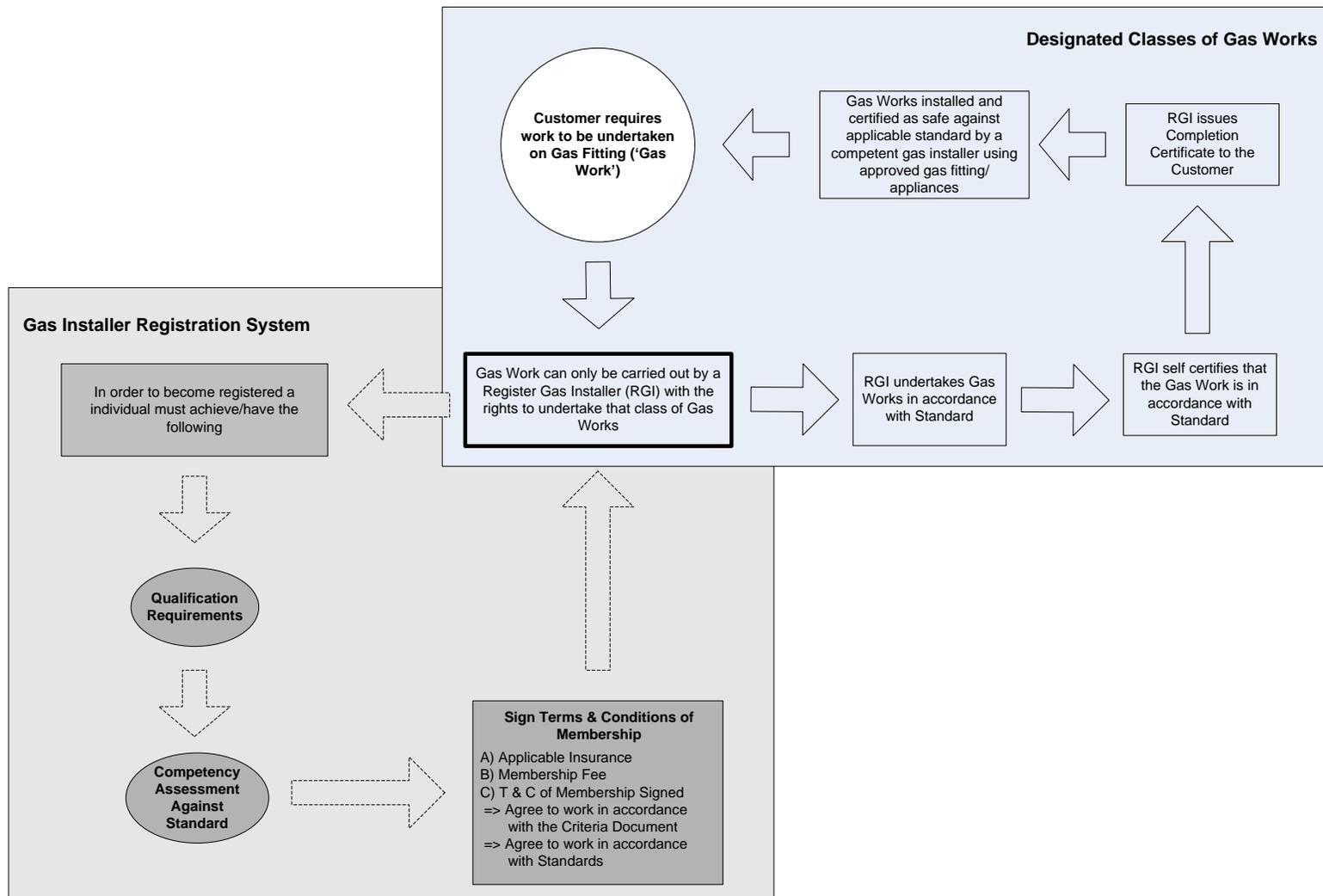


Diagram 4: Illustration of the Regulatory Model

4.4.2 Applicability of the Regulatory Model for Option A: Minimum Scope of Gas Works

Given that primary public policy intent of the 1999 Act is to restrict the undertaking of *gas works* in a domestic setting to registered individuals only, it is not surprising that the regulatory model described in Section 4.4.1 is particularly relevant to the mitigation of risks associated with *Option A: Minimum Scope of Gas Works*' given that:

- There is a high degree of clarity on what constitutes *gas works* in a domestic setting and consistency across the technical requirements in undertaking the different types of *gas work* in such a setting such as all works on LPG fittings and associated flueing (such as LPG cookers, fires, boilers etc);
- The relatively generic nature of this type of work lends itself to development of generic training courses and associated qualifications. For instance there is currently a Gas Installer Domestic (GID) course and award generally available²¹.
- There is a Domestic Gas Installation Standard (I.S. 813²²) which covers the installation of LPG fittings in a domestic setting. Similarly, there are applicable standards which cover the installation of LPG fittings in caravans, mobile homes, LAV's etc. (I.S. EN 1949) and boats etc. (I.S. EN ISO 10239). Again these standards also lend themselves to the development of a relatively simple competence assessment process in order to satisfy that an individual is competent to undertake the *gas work* in accordance with the provisions of the standard.

In this way the CER can satisfy itself that the individually registered installer is competent in undertaking that *gas work*, in a safe manner, in the domestic setting and commits to working to I.S 813 and other relevant standards with respect to that *gas work* (See Diagram 4 in Section 4.4).

²¹ The CER is currently working with industry to develop a FETAC award that will cover IS 813, I.S. EN 1949 and I.S. EN ISO 10239. It is envisaged that the scope of the existing GID will be extended to I.S. EN 1949 and I.S. EN ISO10239 in the interim.

²² Irish Domestic Gas Installation Standard (I.S. 813) published under the authority of the National Standards Authority of Ireland.

4.4.3 Extending the Regulatory Model to cater for Option B: Intermediate Scope of Gas Works

The regulatory model described in Section 4.4.1 is relevant to the mitigation of risks associated with *Option B: Intermediate Scope of Gas Works*, though to a lesser extent than Option A, given that:

- There is a reasonable amount of clarity on what constitutes *gas works* in a commercial setting and consistency across the technical requirements in undertaking the different types of *gas work* in such a setting such as all works on gas pipework, water and space heating appliances and catering appliances;
- The relatively generic nature of this type of work lends itself to development of generic training courses and associated qualifications. A FETAC course is currently being developed, in consultation with industry and other interested parties, to provide for the training required by installers operating in the commercial gas sector (LPG and Natural Gas);
- There is a Non-Domestic Gas Installation Standard (I.S. 820²³) which covers the installation of Natural Gas and LPG fittings in a non-domestic setting, more specifically commercial premises. Also, as in the domestic context, the standard for small craft up to 24m (I.S. EN ISO 10239) applies in a commercial setting. At present there is no equivalent to I.S. EN 1949 for commercial appliances. Both I.S. 820 and I.S. EN ISO 10239 lend to the development of a competence assessment process in order to satisfy that an individual is competent to undertake the *gas work* in accordance with the provisions of the standard.

Although the training course referred to above is not in place at the moment, the broad generic regulatory model approach is suitable to enable the CER to satisfy itself that the individually registered installer is competent in undertaking that commercial *gas work*, in a safe manner, in a commercial environment and commits to working to the I.S. 820, I.S. EN ISO 10239 and other relevant standards with respect to that *gas work*.

²³ Irish Non-Domestic Gas Installation Standard (I.S. 820) published under the authority of the National Standards Authority of Ireland.

4.4.4 Extending the Regulatory Model to cater for Option C: Maximum Scope of Gas Works

The extension of the generic regulatory model described in Section 4.4.1 to include *gas works* on LPG fittings used or designed to be used by Industrial customers is problematic for a number of reasons. Firstly industrial processes are unique and specialised – i.e. there is no generic approach beyond the use of combustion technology and controls. Design, build, construction and maintenance should be undertaken only by individuals who understand that unique process well, often the manufacturer itself. In process work, utilisation of gas is recognised as being integral to the core process(es) and therefore, in most cases, is an integral element of the company's in-house safety regime. To attempt to apply the generic regulatory model, primarily developed to address the safety risks associated with the utilisation of LPG by domestic customers, to this unique and specialised area is unlikely to add any value or specifically address the safety risks associated with this area.

5. The Proposal on the Scope of Gas Works related to Liquefied Petroleum Gas (LPG)

Given the CER's consideration of:

- the requirements and obligations placed on the CER under the 1999 Act;
- the extent of safety risks associated with the utilisation of LPG by domestic, commercial and industrial customers;
- the existing legislative provisions in such environments;
- the suitability of regulatory model provided for the in 1999 Act with respect to the regulation of LPG installers in the commercial and industrial *gas works* area.

it now presents the following proposals for consultation:

The CER proposes that the high level definition of Domestic, Commercial and Industrial LPG Customers outlined in Section 3.2 be accepted.

In line with the decision taken in relation to natural gas (ref. CER/09/083), the CER is clearly obligated to implement '*Option A: Minimum Scope of Gas Works*' with respect to Domestic LPG customers as illustrated in Diagram 2. Therefore, it is proposed that the *gas works* regulations will include work related to the installation, removal, repair or replacement of LPG fittings used or designed to be used by Domestic LPG customers regardless of whether they are used in a Domestic, Commercial or an Industrial setting. It is clear from the 1999 Act that capturing such work under the regulatory system represents the primary public policy intent of the legislation.

However, as outlined in Section 3.1, the CER also has to make a **policy decision** whether or not it is appropriate to extend the scope of *gas works* to include '*Option B: Intermediate Scope of Gas Works*' with respect to Commercial LPG customers, or further still, to include '*Option C: Maximum Scope of Gas Works*' with respect to Industrial LPG customers.

5.1. Installers carrying out Domestic Gas Works relating to LPG

As discussed in Sections 2.0 and 3.0, it is the CER's view that it is obligated to implement '*Option A: Minimum Scope of Gas Works*' with respect to Domestic LPG customers as illustrated in Diagram 1. Therefore the *gas works* regulations must include work related to the installation, removal, repair or replacement of LPG fittings used or designed to be used by Domestic LPG customers as defined in Section 3.2.1. It also includes work on those LPG fittings designed to be used by Domestic LPG customers being used by both Commercial and Industrial LPG

customers (as defined in Section 3.2.2 and 3.2.3). It is clear from the 1999 Act that capturing such work under the regulatory system represents the primary public policy intent of the legislation. The CER also notes that this is consistent with I.S. 813 which states that the Irish domestic gas installations standard includes “domestic-type appliances in non-domestic buildings”.

For clarity purposes, the domestic *gas works* relating to LPG that will be included within the scope of *gas works* comprise the following classes of domestic gas works:

- **Installation** (includes pipework construction/alteration, pipework integrity test, pipework Commissioning, installation and Commissioning of appliances, work on Combined Heat & Power (CHP) units in a domestic setting and certification of new and existing installations including those undertaken by others); and
- **Servicing/Maintenance** (includes appliance repair/servicing/maintenance and work on Combined Heat & Power (CHP) units in a domestic setting).

The CER proposes that domestic *gas works* will cover any work on a LPG fitting within the scope of I.S.813, I.S. EN 1949, and I.S. EN ISO 10239 with the following exceptions;

- The design of gas works;
- Work on the point of delivery and upstream of the point of delivery;
- Work on gas fittings for the supply of gas for automotive use;
- Connection or replacement of a flexible connector connecting a refillable cylinder to installation pipework.
- Work on a single LPG installation without fixed pipework, achieved by a flexible connector from an adjacent LPG storage cylinder (e.g. cabinet heater, barbecue, patio heater).
- Work that is specifically designed to be effected by a person without the use of a tool; and
- The manufacture of LPG fittings.

The CER proposes to extend ‘*Option A: Minimum scope of Gas Works*’ to include those *gas works* on LPG fittings designed to be used by Domestic LPG customers. In order to do this the CER proposes to draft and enact Regulations which will designate those *works* related to the installation,

removal, repair or replacement of LPG fittings used or designed to be used by Domestic gas customers regardless of whether they are used by a Domestic, Commercial or an Industrial customer, as defined in Section 4.2, as a class of *gas works* and provide for the inclusion of such works in the regulatory system. Therefore post the enactment of these regulations; it will be an offence for a person to carry out *gas works* relating to domestic LPG unless he/she is registered with the GSSB.

Note: Estimates obtained from the GSSB would indicate that there are approximately 650 gas installers presently registered who operate in the LPG sector, either exclusively or as part of their overall business. Further estimates indicate that there are between 250 and 350 additional LPG installers who will enter the registration process when it extends to LPG. Indications are that the registered LPG installer network will number 1,000 approximately. It is envisaged that there will be no differentiation between domestic Natural Gas and domestic LPG installers in the regulatory system as both groups of installers operate to the same standards.

5.2 Installers carrying out Commercial Gas Works relating to LPG

The CER is interested in respondents' views on the appropriate classes of *gas works* in the "commercial area" and the training and competency assessment requirements necessary for individuals to undertake such work.

As set out in Section 2.3, the 2005 SHWAW Act and the associated regulations currently place clear safety responsibilities upon employers with respect to the installation, commissioning, maintenance, repair or removal of LPG fittings. However the ability of employers to form such a judgement regarding an individual's competence to undertake *gas work* will change, determined by the technical knowledge the individual employer has. In the case of many of the Commercial LPG customers defined in Section 3.2.2, it is highly likely there is little or no technical knowledge in this area and therefore they will not have the ability to establish an installer's level of competence to undertake such work.

The CER proposes extending its decision on *Option B: Intermediate Scope of Gas Works* with respect to Commercial natural gas customers (ref. [CER/09/083](#)) to include those works on LPG fittings designed to be used by Commercial LPG Customers by designating those works on LPG fittings designed to be used by Commercial gas customers as *Gas works* in the medium term (i.e. post 2011), when the following conditions exist:

- a. **the new regulatory system has operated successfully in the domestic sphere for a reasonable period of time;**
- b. **appropriate training course/courses and award(s) which relate directly to commercial *gas works* is/are widely available in the commercial arena for a reasonable period of time; and**
- c. **A competency assessment process is in place which enables the competence of an individual to be formally assessed against the provisions of the standards applicable to the commercial *gas work* (I.S. 820 and other relevant standards).**

In this way the CER can satisfy itself that the individually Registered Gas Installer is competent to undertake 'commercial' *gas works*, in a safe manner. When the above conditions exist, the CER will be satisfied that its regulatory model can be applied to mitigate any potential risks associated with *Option B: Intermediate Scope of Gas Works*' and will introduce further regulations which will prohibit persons who are not registered from undertaking such "commercial" *gas works*.

For clarity purposes, the CER intends that, when introduced, commercial *gas works* will refer to the following classes of commercial gas works:

- **Installation** (includes pipework construction/alteration, pipework integrity test, pipework Commissioning, installation and Commissioning of appliances and certification of new and existing installations including those undertaken by others); and
- **Servicing/Maintenance** (includes appliance repair/servicing/maintenance).

The CER intends that, when introduced, commercial *gas works* will cover any work on a LPG fitting or natural gas fitting within the scope of I.S.820²⁴ and other relevant standards with the following exceptions;

- The welding of pipework for commercial customers prior to the admission of gas;
- The design of gas works (LPG and natural gas);
- Work on the point of delivery and upstream of the point of delivery;
- Work on gas fittings for the supply of gas for automotive use;

²⁴ Irish Non-Domestic Gas Installation Standard (I.S. 820) published under the authority of the National Standards Authority of Ireland (2003).

- Connection or replacement of a flexible connector connecting a refillable cylinder to installation pipework.
- Work on a single appliance LPG installation without fixed pipework, achieved by a flexible connector from an adjacent LPG storage cylinder (e.g. patio heater).
- Work that is specifically designed to be effected by a person without the use of a tool; and
- The manufacture of gas fittings (LPG and natural gas).

Note: The CER recognises the emergence of Combined Heat and Power (CHP) technology and will consult with the Industry when introducing commercial *gas works* into the regulatory scheme as regards the appropriateness of its inclusion or exclusion as a class of commercial *gas works*.

Note: The CER notes that progress is being made with respect to the development of appropriate training course/courses and award(s) which relate directly to commercial *gas works*. The availability of such training courses will facilitate the introduction of new regulations in this area in the future. The CER is in the process of liaising closely with the “commercial” gas sector and other interested parties on these matters.

5.3 Installers carrying out Industrial Gas Works relating to LPG

The 2005 SHWAW and the associated regulations also place clear responsibilities with respect to the installation, commissioning, maintenance, repair or removal of LPG fittings which are used or designed to be used by an industrial customer. It is reasonable to assume that employers in an industrial setting are more likely to have some level of understanding of the specific competency requirements for individuals to undertake work on their industrial business operations which utilise highly specialised industrial gas-burning equipment and processes. Indeed it is in the employers’ economic interest to allow only a highly competent individual to undertake work on such equipment as the costs of equipment malfunction can be high. In many instances, industrial and large commercial employers engage specifically trained in-house individuals to undertake such work.

If one concurs with this analysis, it suggests that there is not a strong requirement or benefit in extending the scope of the regulatory system to include Industrial LPG customers at this stage given that it is reasonable to assume that they have the capacity and relevant information to hand to form the judgement with respect to competence. As such the 2005 SHWAW provides the relevant enforcement powers in this area. Furthermore, it can be argued that extending the regulatory model to

include *gas works* on LPG fittings used or designed to be used by industrial customers is problematic for a number of reasons. Firstly industrial processes are unique and specialised – i.e. there is no generic approach beyond the use of combustion technology and controls. Design, build, construction and maintenance should be undertaken only by individuals who understand that unique process well, often the manufacturer itself. In process work, utilisation of gas is recognised as being integral to the core process(es) and therefore, in most cases, is an integral element of the company's in-house safety regime. To attempt to apply the generic regulatory model, primarily developed to address the safety risks associated with the utilisation of gas by domestic customers, to this unique and specialised area is unlikely to add any value or specifically address the safety risks associated with this area.

Therefore, the CER proposes not to extend the regulatory model and the definition of *gas works* to include those works on LPG fittings designed to be used by Industrial Gas Customers (i.e. *Option C: Maximum Scope of Gas Works*) at this stage given that:

- **The Health and Safety Authority already has an enforcement role in this area; and**
- **The generic regulatory model, implicit under the 1999 Act is not appropriate to address the safety risks associated with the industrial area given the unique and specialised nature of industrial processes.**

However, the CER will maintain a watching brief on the safety statistics in this area, and will not close off the possibility of regulating industrial works if it deems it appropriate in the future.

6.0 Next Steps

The CER now invites comment on its proposals as outlined in this consultation paper. The specific aspects on which the CER particularly invites comments are:

- a) The proposed definitions for Domestic, Commercial and Industrial LPG Customers (Section 3.2);
- b) The appropriateness of the CER's analysis of the policy considerations in Section 4; and
- c) The appropriateness of the CER's proposals in Section 5.

The CER is committed to full consultation throughout the process of developing regulations which define *gas works* relating to LPG. The CER commits to considering all views equally and affording each respondent the opportunity to clarify any issue raised in this paper.

Following this consultation, the CER will issue a decision paper on the matter of *gas works* relating to LPG, it is anticipated this decision will be published in May 2011. This will be subsequently translated into regulations as required under the 1999 Act. This will take place before the end of 2011.

The closing date for this consultation is 07 March, 2011.

Appendix A – List of Substantive Questions

It should be noted that **respondents are in no way obliged to respond to the table provided below and are welcome to submit comments in their preferred format.** It is included to allow for a “short-cut” option for respondents to submit their comments to the CER

Respondents are invited to complete the table to indicate their position on the questions being asked. Respondents should outline YES or NO answers to each of the questions listed. If you have a further comment which will clarify your answer, this should be included in the Comments box.

Question/ Proposal	Yes	No	Comments
<p>Q1. Do you agree with the proposed definitions in Section 3.2 for;</p> <ul style="list-style-type: none"> – Domestic Customers (fixed and mobile), – Commercial Customers (fixed and mobile); and, – Industrial LPG Customers. 			
<p>Q2. Do you agree with the CER’s analysis of the policy considerations in Section 4?</p>			
<p>Q3. Do you agree with the CER’s proposals set out in Section 5?</p> <p>Option A: Minimum Scope of Gas Works with respect to Domestic LPG Customers</p> <p>Option B: Intermediate Scope of Gas Works with respect to Commercial LPG Customers</p> <p>Option C: Maximum Scope of Gas Works with respect to Industrial LPG Customers.</p>			

Appendix B – Glossary of Terms

CER:	Commission for Energy Regulation.
CO	Carbon Monoxide
GSSB:	Gas Safety Supervisory Body, as designated by the CER under the 1999 Act. See <u>Vision for the Regulation of Gas Installers with Respect to Safety (ref. CER/07/225) – 18th December, 2007.</u>
HSA:	Health and Safety Authority.
LPG:	Liquefied Petroleum Gas.
MoU:	Memorandum of Understanding.
2005 SHWAW Act:	Safety, Health and Welfare at Work Act 2005.