



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

## Regulation of Electrical Contractors with respect to Safety:

### Decision on the Scope of Restricted Electrical Works

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## **Abstract**

This paper outlines CER's decision on the scope of Restricted Electrical Works. This decision will be implemented from 1<sup>st</sup> October 2013. This will mean that it will be illegal for a non-Registered Electrical Contractor (REC) to carry out most electrical work in domestic premises.

### **Target Audience:**

This decision paper is aimed at individuals, companies and organisations operating within the electrical industry, and members of the general public.

### **Related Documents:**

- [Vision for the Regulation of Electrical Contractors with respect to safety \(CER/07/203\)](#).
- [Criteria for the Regulation of Electrical Contractors \(CER/13/098\)](#).<sup>1</sup>
- [Definition for the Scope of Controlled Electrical Works \(CER/09/009\)](#).
- [Consultation on the Scope of Restricted Electrical Works \(CER/11/077\)](#).
- [Proposed Decision on the Scope of Restricted Electrical Works \(CER/11/177\)](#).

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<sup>1</sup> This document may be modified from time to time.

## Executive Summary

The 1999 Electricity Regulation Act, as amended by the Energy (Miscellaneous Provisions) Act 2006, (the “Act”), gave the Commission for Energy Regulation (CER), the statutory function to regulate the activities of electrical contractors with respect to safety. The Regulatory Objective was stated as:

“To protect the safety interests of customers with respect to electrical installation activities through creating a suitable regulatory system, which provides for electrical works to be carried out, tested and certified in compliance with the appropriate technical rules/standards.”

Under this function the CER has already defined “Controlled Electrical Works” (CER/09/009) which are electrical works that must be certified if completed by a Registered Electrical Contractor (REC). The CER has also issued a consultation (CER/11/077) and proposed decision paper (CER/11/177) on the scope of Restricted Electrical Works. Restricted Electrical Works are works that only a REC can complete. Following a review of responses received to the consultation and proposed decision papers; the CER defines the scope of Restricted Electrical Works as follows:

### **CER decision on scope of Restricted Electrical Works<sup>2</sup>;**

The implementation of this decision will mean that all Controlled Electrical Works<sup>3</sup>, as currently defined, in a domestic setting can only be carried out by a REC. There will be no legal exemption for the owner/occupier. However, minor electrical work will remain outside the scope of Restricted Electrical Works.

Restricted Electrical Works will cover:

1. the installation, commissioning, inspection and testing of a new Electrical Installation which is fixed, fastened or mounted or otherwise secured so that its position does not change and requires connection or re-connection to the distribution network or the transmission network, as the case may be;
2. the modification, installation or replacement of a Distribution Board including customer tails on either side of the Main Protective Device or of an Electrical Installation in any of the special locations listed in Part 7 of the National Rules for Electrical Installations, as the case may be;
3. the installation or replacement of one or more circuits in an Electrical Installation, including the installation of one or more additional protective devices for such circuits on a Distribution Board; or
4. the inspection, testing or certification of, or reporting on, existing Electrical Installations covered by Chapter 62 of the National Rules for Electrical Installations;

in a Domestic Property.

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<sup>2</sup> This definition has not changed relative to the proposed decision paper. However some clarification has been made to ensure clarity.

<sup>3</sup> CER/09/009

This means that it will be illegal for an electrical contractor that is not registered with a Safety Supervisory Body (SSB) to complete domestic electrical work<sup>4</sup>.

Consequently, Restricted Electrical Works does not include:

- a) Electrical works in potentially explosive atmospheres;
- b) Electrical works in a Commercial Premises setting including MV and HV connection and installations;
- c) Electrical works on a construction site;
- d) Electrical works within exhibitions, shows and stands;
- e) Electrical works on agricultural and horticultural installations;
- f) Electrical works on public lighting and associated cabling;
- g) Minor electrical works including the replacement of an electrical accessory such as a light switch, the replacement or relocation of light fitting where the existing circuit is retained, the provision of an additional socket to an existing radial circuit, or electrical works which do not require the issuance of a completion certificate under Section 9D of the Act.

The CER has removed the category of subsystems from its definition of Restricted Electrical Works for domestic installations. The installation of a subsystem in a domestic property would require a power supply via the distribution board or by adding a circuit. Rather than attempting to provide non exhaustive list of subsystem installations, the CER is of the view that the electrical work which should be restricted pertaining to the installation of subsystems is captured in items two and three above. Minor electrical work will remain outside the scope of Restricted Electrical Works.

On the 6<sup>th</sup> July 2012 the CER received Ministerial consent to draft regulations designating Restricted Electrical Works. The CER drafted these regulations and they were laid before each House of the Oireachtas by the Minister. These were approved on 3<sup>rd</sup> July 2013 at the Joint Committee on Transport and Communications. The CER has set a commencement date of 1<sup>st</sup> October 2013 for these regulations, from this date it will be illegal for anyone other than a REC to carry out Restricted Electrical Works.

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<sup>4</sup> With some exceptions

## Acronyms

<b>ATEX:</b>	ATmospheres EXplosibles (i.e. Explosive Atmospheres).
<b>CER:</b>	Commission for Energy Regulation.
<b>CENELEC:</b>	European Committee for Electrotechnical Standardisation.
<b>CHP:</b>	Combined Heat and Power.
<b>DSO:</b>	Distribution System Operator.
<b>ECSSAI:</b>	Electrical Contractors Safety & Standards Association (Ireland).
<b>ETCI:</b>	Electro-Technical Council of Ireland Limited (ETCI).
<b>HSA:</b>	Health and Safety Authority.
<b>HV:</b>	High Voltage.
<b>LV:</b>	Low Voltage.
<b>MCB:</b>	Miniature Circuit Breaker.
<b>MV:</b>	Medium Voltage.
<b>REC:</b>	Registered Electrical Contractor.
<b>RECI:</b>	Register of Electrical Contractors of Ireland.
<b>S.I.:</b>	Statutory Instrument.
<b>SSB:</b>	Safety Supervisory Body.
<b>TSO:</b>	Transmission System Operator

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## **1.0 Introduction**

### **1.1 The Commission for Energy Regulation**

The Commission for Energy Regulation (CER) is the independent body responsible for the economic regulation of Ireland's electricity and gas sectors, and the regulation of petroleum undertakings, natural gas undertakings, natural gas installers and electrical contractors with respect to safety.

The CER's role as an economic regulator began with its initial establishment under the Electricity Regulation Act, 1999 (the 1999 Act) where it was given regulatory powers over the electricity sector. The enactment of the Gas (Interim) (Regulation) Act, 2002 expanded the CER's jurisdiction to include the economic regulation of the natural gas sector. More recently the Electricity Regulation Amendment (SEM) Act, 2007 outlines the CER's functions in relation to the Single Electricity Market (SEM) for the island of Ireland. This wholesale electricity market is regulated jointly by the CER and the Northern Ireland Authority for Utility Regulation (NIAUR). Through its economic regulatory powers and functions the CER is working to ensure that consumers benefit from regulation and the introduction of competition in the energy sector.

The CER's role in safety regulation commenced under the Energy (Miscellaneous Provisions) Act, 2006 (the 2006 Act). The 2006 Act gave the CER functions and powers relating to the safety regulation of natural gas undertakings (such as Bord Gáis Éireann), natural gas installers (extended in 2011 to include LPG installers) and electrical contractors. By virtue of the 2006 Act, the CER was required to establish and implement a Natural Gas Safety Regulatory Framework which outlines how the CER discharges its downstream safety regulatory responsibilities. The Petroleum (Exploration and Extraction) Safety Act, 2010 (the 2010 Act) expanded CER's safety role to include the regulation of petroleum undertakings engaging in certain petroleum activities with respect to safety. The 2010 Act requires the CER to establish and implement a risk based Petroleum Safety Framework which is based on a safety case regime.

### **1.2 Purpose of this paper**

The purpose of this paper is to outline the CER's decision regarding the scope of Restricted Electrical Works, and to clarify the rationale for the decision.

### **1.3 Comments Received**

The CER received eight submissions to the proposed decision paper (CER/11/177), and would like to thank all those who submitted a response. Responses to these submissions are dealt with in Section 4. Submissions were received from the following organisations:

#### **Respondents to proposed decision paper (CER/11/177)**

- |   |
|---|
| <ol style="list-style-type: none"><li>1. Schneider Electric</li><li>2. Edina</li><li>3. Sabre Electrical Services Ltd</li><li>4. Project Operational Consultancy Ltd</li><li>5. SAFed</li><li>6. HSA</li><li>7. Aviva Insurance Europe SE</li><li>8. RECI</li></ol> |
|---|

Please note that 28 responses were received to the consultation paper. These are published alongside the Proposed Decision paper, and are responded to within the Proposed Decision paper.

### **1.4 Structure of this paper**

This paper is structured in the following manner:

- **Section 1:** Provides an introduction.
- **Section 2:** Provides background information regarding the CER's role with respect to the regulation of electrical contractors, and the development of Controlled Electrical Works and Restricted Electrical Works.
- **Section 3:** Outlines the CER's decision regarding the introduction of Restricted Electrical Works (i.e. Defined Definition Approach: Option Three), and the rationale for making this decision.
- **Section 4:** Summarises the various comments received to the proposed decision paper (CER/11/177), and responds to the different points made.
- **Section 5:** Summary & next steps.



## 2.0 Overview of Electrical Safety Regulatory Framework

### 2.1 Introduction

The objective of this section is to provide an overview of the current electrical safety regulatory framework in Ireland. Specifically, this section identifies the steps taken by the CER in fulfilling its regulatory functions under the Electricity Regulation Act 1999, as amended by the Energy (Miscellaneous Provisions) Act 2006. Additionally, this section outlines the concept of Controlled and Restricted electrical works as provided for under the 2006 Act, and the process undertaken by the CER to arrive at a definition for Controlled Electrical Works. Finally, this section examines the rationale behind the development of Restricted Electrical Works.

### 2.2 Background & Context to the Regulation of Electrical Works

Pursuant to the implementation of the Energy (Miscellaneous Provisions) Act in 2006, which amended the Electricity Regulation Act, 1999, the CER was given the statutory authority to regulate the activities of electrical contractors with respect to safety. In order to fulfil its regulatory obligations, the CER undertook to design and develop a regulatory framework that would ensure that defined electrical installations are carried out by competent electrical contractors to the required Technical Standards or rules.<sup>5</sup>

Consequently, in November 2007, the CER published a Vision Document, which provided a blueprint for the creation of the regulatory model for electrical safety. Subsequent to the publication of the Vision Document, in 2008 the CER published the Criteria Document (CER/08/071), which detailed the rules and obligations for participants operating within the electrical safety regulatory framework. Additionally, in October 2008 the CER designated the Register of Electrical Contractors of Ireland Ltd (RECI) and the Electrical Contractors Safety and Standards Association Ireland Ltd (ECSSAI) as the electrical Safety Supervisory Bodies (SSBs), with responsibility for regulating the activities of electrical contractors on a day to day basis<sup>6</sup> for a period of 7 years.

With reference to the SSB's core activities, both electrical SSBs are required to comply with the requirements as stated within the Criteria Document,<sup>7</sup> which include, but are not limited to the following:

- (i) Receipt, processing and evaluation of Applications for Registration;
- (ii) Registration of electrical contractors and publication of a Register of Electrical Contractors;

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<sup>5</sup> Technical Standards are defined as any IS EN Electrical Standards, the National Wiring Rules for LV installations, including any other technical rules or standards as may otherwise be specified and superseded by the CER in consultation with the stakeholders as may be determined by the CER.

<sup>6</sup> The creation of a regulatory framework and the appointment of two SSBs in December 2008 replaced the voluntary, self-regulatory system (operated by both RECI Ltd & ECSSA Ltd).

<sup>7</sup> CER/13/098 'Commission Decision on Electrical Safety Supervisory Criteria Document' Section B. Please note this document may be updated from time to time.

- (iii) Monitoring, Inspection and Audit of electrical contractors registered with the Body;
- (iv) Investigation of complaints received and the disciplining of electrical contractors registered with the Body;
- (v) Inspection of works of Third Parties;
- (vi) Management of the distribution, sale, recording, control and the validation of Certificates;
- (vii) Public and industry awareness activities;
- (viii) Interaction and co-ordination of activities with other Bodies and such other agencies, bodies, committees and Government Departments, as the CER may direct from time to time;
- (ix) Maintaining records of, and reporting on, the activities of the Body; and
- (x) The operation, and use, of the Brand in accordance with the requirements specified by the CER.

Additionally, with respect to the registration of RECs<sup>8</sup> by the SSBs, each REC is required to demonstrate that:

- they have in place and maintain insurance cover as may be specified by the SSB/CER.
- their Qualified Certifier has served a recognised apprenticeship as an electrician, which resulted in the awarding of a National Craft Certificate; or another suitable electrical award, equivalent to Level 6 or higher on the National Framework of Qualifications; and
- their Qualified Certifier has successfully completed a recognised course in “Testing, Verification and Certification” in the previous number of years. If the recognised course that was completed was accredited the period is 5 years. If the recognised course that was completed was not accredited this period is 3 years<sup>9</sup>.

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<sup>8</sup> The term Registered Electrical Contractor (REC) refers to a registered party that undertakes electrical installation works. This may be either an individual sole trader operating as the electrical contractor or may be a larger operation, constituting many individuals (e.g. general operatives, engineers and electricians).

<sup>9</sup> Unaccredited courses completed from 1<sup>st</sup> July 2013 will not be recognised. However if somebody successfully completed a recognised unaccredited course prior to 1<sup>st</sup> July 2013 it will still remain valid for 3 years (even if 3 year period ends post 1<sup>st</sup> July 2013).

## **2.3 Legislative Basis for Controlled Electrical Works and Restricted Electrical Works**

Fundamental to the development of the regulatory system for electrical safety is the scope of those electrical works that are to be regulated from a safety perspective, as this will determine the obligations to be placed on any parties carrying out such works.

Specifically, the 2006 Act introduced the concept of Specified Works (hereafter referred to as “Controlled Electrical Works”) and Designated Electrical Works (hereafter referred to as “Restricted Electrical Works”) into the 1999 Act, which provided the CER with the basis for defining what electrical works would be considered for the purposes of the new regulatory system for RECs.<sup>10</sup>

Controlled Electrical Works refer to electrical work which if completed by a REC must be certified. Under Sections 9D (13) and (14) of the 1999 Act (as amended by the 2006 Act), the legislation permits the certification of Controlled Electrical Works under the following circumstances:

- i. electrical works undertaken by a REC that are self-certified through the issuance of a Certificate; and
- ii. electrical works undertaken by a Non-REC (but who is required to be competent and insured) that are examined by an inspector of an SSB and the certificate is counter signed by an Inspector of an SSB.<sup>11</sup>

Restricted Electrical Works are works that can only be completed by a REC; the 1999 Act (as amended by the 2006 Act) states with respect to Restricted Electrical Works (referred to within the Act as designated electrical works) the following:

Section 9E. -

- (1) The Commission 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 electrical works to be designated electrical works.
- (2) Where the Commission proposes to make regulations under subsection (1) the Minister, where he or she has approved the draft of such regulations, shall cause a draft of the regulations to be laid before each House of the Oireachtas and the regulations shall not be made until a resolution approving of the draft has been passed by each such house.

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<sup>10</sup> In order to facilitate the introduction of regulated electrical works and to distinguish between the two classes of works, the CER’s 2007 Vision Document stated that Specified Works shall be referred to as Controlled Electrical Works, whilst Designated Electrical Works shall be referred to as Restricted Electrical Works.

<sup>11</sup> The procedures for regulating Electrical Installations undertaken by a Non-REC, which are subsequently certified by an Inspector within an SSB, are detailed in the Third Party Inspection Common Procedure (CER/09/108) which forms part of the Criteria Document.

(3) A person shall not carry out electrical works which are designated electrical works unless that person is a registered electrical contractor.

(a) A person who contravenes subsection (3) is guilty of an offence and liable- on summary conviction to a fine not exceeding €5,000 or a term of imprisonment not exceeding 6 months or to both, or

(b) on conviction on indictment to a fine not exceeding €15,000 or a term of imprisonment not exceeding 3 years or both.

Within the 2007 Vision Document, the CER confirmed that it would adopt a two phase approach towards the implementation of Regulated Electrical Works by:

1. specifying the scope of Controlled Electrical Works at the outset of the new regulatory system; and
2. subsequently specifying and introducing Restricted Electrical Works after an initial period of operation of the new regulatory system for electrical safety.<sup>12</sup>

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<sup>12</sup> The rationale for the deferred introduction of Restricted Electrical Works until after an initial period of operation was to provide industry participants the opportunity to understand the new regulatory system and the associated requirements imposed through the Criteria Document.

## **2.4 Controlled Electrical Works**

In order to facilitate the introduction of Controlled Electrical Works, the CER published a decision paper (CER/09/009), which outlined the scope of Controlled Electrical Works. Controlled Electrical Works are defined as major electrical installation works at Low Voltage Installations<sup>13</sup> (including additions, alterations and/or extensions), which are covered by the Technical Rules and require the issuance of a Certificate.

Specifically, the decision paper stated that major electrical installation works (including additions, alterations and/or extensions), which are covered by the current edition of the National Wiring Rules, and involve the following are considered Controlled Electrical Works:

### **CONTROLLED WORKS**

Controlled Works are major electrical installation works (including additions, alterations and/or extensions) which are covered by the National Wiring Rules and which involve:

1. the installation, commissioning, inspection, and testing of a new fixed electrical installation requiring connection or reconnection to the electricity network;
2. the installation or replacement of a Distribution Board or Consumer Unit, or new installation in special locations as defined in Part 7 of the National Wiring Rules ET101 and ET105;
3. the installation or replacement of one or more extra circuits in an existing installation, including the installation of one or more additional protective devices for such circuits on a distribution board;
4. Subsystems installed in Commercial, Industrial, and Domestic installations where the installation falls within the remit of the National Wiring Rules;
5. the inspection, testing and certification of existing electrical installations (in accordance with Chapter 62 of the Wiring Rules (ET 101 –Fourth Edition-2008 and to conform with Regulation 89 of SI No 732 of 2007).

Any works which do not fall within the above scope are not Controlled Works and shall not necessarily require a Completion Certificate to issue. However, it is recommended that for all other works, an appropriate form of certification is used (for example, a Declaration of Compliance with ET 101 for Minor Works, where appropriate). Furthermore, all entries on the Completion Certificate or Declaration of Compliance should be filled in by the installing electrical contractor.

In arriving at a definition for Controlled Electrical Works, the CER employed a risk-based approach to assess the safety risks associated with each class of electrical works. Specifically, the scope of Controlled Electrical Works was determined by an analysis of

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<sup>13</sup> The rationale for the focus on Low Voltage works is that it presents the highest risk to public safety.

the options of managing the specific safety risk posed by the various types of electrical work, the practicalities of enforcing the system and the need to counter against over-regulation for limited benefit.

While the primary focus of the Controlled Electrical Works decision paper is in the area of low voltage installations, it should be noted that the definition of Controlled Works is such that it includes new connections at Medium Voltage and High Voltage, and therefore require certification when completed by a REC.<sup>14</sup> It should also be noted that installation and testing of electrical systems subject to the National Wiring Rules, in Potentially Explosive Atmospheres, and Public Lighting and associated cabling (with the exception of lighting that is operated by the DSO<sup>15</sup>) are within the scope of Controlled Electrical Works.

#### **2.4.1 Certification Process for Controlled Electrical Works**

In order to ensure that Controlled Electrical Works are carried out in line with the relevant technical rules and standards the CER has implemented, via the SSBs, a Certification Process (Common Procedure No. 1: Certification (CER/09/107)), which is used to record and test the safety of an electrical installation by the REC.

Certificates for Controlled Electrical Works can only be accessed for use by RECs, who are registered with either of the SSBs. The purpose of the Certification process, and the issuance of the Certificate, is to provide assurance to the customer that the installation has been carried out and tested in line with the relevant Technical Rules and standards (i.e. the REC confirms that the installation is in compliance with the relevant Technical Rules by signing the Certificate, and then provides a copy to the customer and the SSB). Furthermore, the issuance of a Certificate by a REC to the SSB also provides an audit trail for the SSBs should a problem arise with the electrical installation.

For all new installations that require connection to the electricity network, a copy of the Certificate is submitted by the REC to their respective SSB for processing and evaluation. Once approved by the SSB, the relevant details on the Certificate are then submitted to the Distribution System Operator (DSO). The DSO, on foot of receipt of the specific details taken from the Certificate, will make supply available to the customer.

#### **2.4.2 Enforcement of Controlled Electrical Works**

The 1999 Act (as amended by the 2006 Act) does not make it an offence for an unregistered party to carry out Controlled Electrical Works. However, under the 1999 Act (as amended by the 2006 Act) any unregistered person who certifies such electrical work could be committing an offence, if they are holding themselves out to be a REC. Section 9D States:

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<sup>14</sup> The issues surrounding Medium Voltage Installations and electrical systems in Potentially Explosive Atmospheres is discussed in further detail in Section Four, regarding the definition for Restricted Electrical Works.

<sup>15</sup> Lighting operated by the DSO are outside the scope of the National Wiring Rules ET101

(25) A person shall not describe himself or herself as a registered electrical contractor or in a manner likely to suggest that such a person is for the time being a member of a designated body.

(26) A person who contravenes subsection (4), (24) or (25) is guilty of an offence and liable –

(a) on summary conviction to a fine not exceeding €5,000 or a term of imprisonment not exceeding 6 months or to both, or

(b) on conviction on indictment to a fine not exceeding €15,000 or a term of imprisonment not exceeding 3 years or both.

Currently, the main incentive for the customer to engage the services of a REC is where the electrical installation requires a new connection to the electricity network. The Distribution System Operator (DSO) will not make supply available to a customer without first receiving confirmation from the REC's respective SSB that the installation has been tested and certified by a REC.

The DSO requires this Certificate in order to satisfy itself that the installation is safe before they make supply available. Therefore, this control mechanism for new connections reduces the safety risk to the customer, as it is a mandatory requirement in the case of all new connections that a Certificate is issued, thereby requiring the involvement of a REC.

However, outside of new connections to the network, there is a significant amount of electrical work that comes under the definition of Controlled Electrical Works. In fact, new connections have dropped significantly over the past number of years, primarily due to the decline of new builds. This decrease can be seen through the sale of Completion Certificates, which has also declined significantly over the past number of years. Figures show that in 2008 there were 62,000 new connections to the network compared to 15,122 in 2011. New connections to the network now make up a smaller percentage of the overall amount of electrical work that is being carried out for consumers.

Although all Controlled Electrical Work require certification if completed by a REC, without the requisite legal powers and in the absence of any control mechanism, such as the one used by the DSO for new connections, it is difficult to ensure the work is completed by RECs and certified. It is reasonable therefore to assume that there is a significant amount of Controlled Electrical Work outside of new connections that is being carried out by potentially non competent parties. The lack of enforcement in relation to Controlled Electrical Works is creating a situation where non competent parties can potentially circumvent the current regulatory system and therefore undermine the certification process for Controlled Electrical Works, which was developed to provide consumer protection with respect to electrical safety. The CER notes that this may pose a potential safety risk to the general public.

Electrical installations which are not installed correctly present immediate and possibly life threatening risks to the users and people in the vicinity of the installation. In addition to the immediate risks, the nature of electrical installations is such that faults may not present themselves until the system is stressed or changed. Thus, a faulty installation such as incorrect cable size, oversized protection, inadequate earthing or poor

connection may not be apparent to the user and could allow the system to operate normally but presents a risk of fire or electrocution on a continuous basis. Fire Authority statistics show that there is on average 450 domestic fires per year that relate to electrical installations. There is a strong and logical argument to be made that there is a significant risk where there are untrained (non competent) personnel associated with an installation. This decision paper will reduce this risk.

## **2.5 Minor Electrical Works**

The CER when defining Controlled Electrical Work recognised that a certain amount of Do-It-Yourself (or “DIY”) electrical installation work is a feature of electrical installations in domestic premises in this country and generally involves “like for like” replacements of switches, sockets, lighting fittings and/or additions to an existing circuit. This work must also be in compliance with the National Wiring Rules. However, Minor Electrical Works are currently outside the scope of Controlled Electrical Works and also, under the definition, outside the scope of Restricted Electrical Works.

The CER is of the view, having given consideration to the responses received to its consultation on this issue, that Minor Electrical Works do not impose a significant safety risk on the consumer, and therefore has decided they will be exempt from the scope of Controlled and Restricted Electrical Works. Additionally, restricting Minor Electrical Works would achieve very limited public safety benefits, whilst imposing a disproportionate cost on customers.

However, minor works may be included in the future based on assessment of risks or evidence to the contrary.

Therefore, Minor Electrical Works can be undertaken by a non-registered party, and do not require the issuance of a Certificate. Examples of Minor Electrical Works include the following:

- **Replacement of an electrical accessory such as light switch;**
- **Replacement or relocation of light fitting where the existing circuit is retained; and**
- **Provision of an additional socket to an existing radial circuit.**

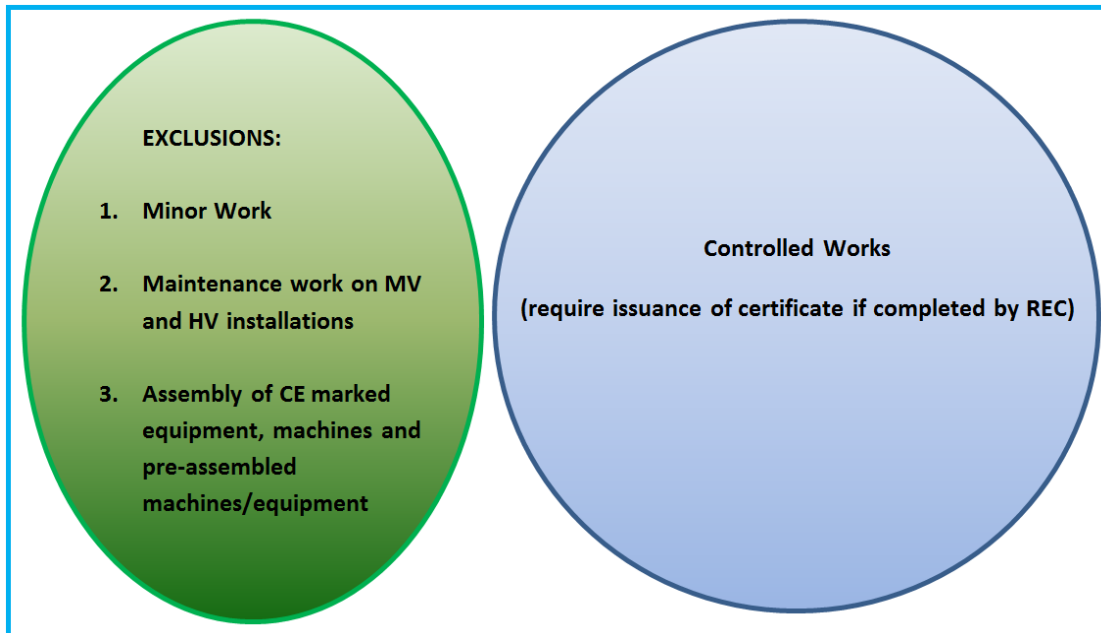
To summarise, the regulatory framework for electrical safety up to now before the introduction of Restricted Works involves the certification of Controlled Electrical Works (compulsory if completed by REC) and Minor Electrical Works (non-compulsory), as illustrated in Figure 2.5.1.<sup>16</sup> Under the regulatory regime, Controlled Electrical Works can be certified by either a REC or through a Third Party Inspection, while Minor Electrical Works can be completed by either a REC or by a suitably trained person or competent person, and do not legally require the issuance of Certificate.

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<sup>16</sup> Within the current regulatory environment, maintenance work on MV and HV installations, and the assembly of CE marked equipment, CE marked machines and pre-assembled CE marked machines/equipment are not considered Controlled Electrical Works and do not require a certificate.



**Fig 2.5.1 Regulatory Framework before introduction of Restricted Works**



## **2.6 Restricted Electrical Works**

Section 9E of the Electricity Regulation Act 1999 (as amended by section 4 of the 2006 Energy (Miscellaneous Provisions) Act), states that the CER may by regulations designate a class or classes of electrical works to be Restricted Electrical Works. Given the potential safety risk posed by unregistered and potentially non competent individuals carrying out Controlled Electrical Works, which do not require connection by the DSO, the CER deems it appropriate to introduce Restricted Electrical Works. As stated in Section 2.4.2, this would enable the CER to prosecute unregistered individuals carrying out Restricted Electrical Works, thus reducing potential electrical safety risks to the general public.

Following a consultation process and after considering all responses received the CER is now issuing its final decision paper on the scope of Restricted Electrical Works. On the 6<sup>th</sup> July 2012 as required by the 1999 Act (as amended by the 2006 Act) the CER received Ministerial consent to draft regulations designating Restricted Electrical Works. The CER has drafted these regulations and they have been laid before each House of the Oireachtas by the Minister and been approved.

The CER has set a commencement date of 1<sup>st</sup> October 2013 for these regulations, from this date it will be illegal for anyone other than a REC to carry out Restricted Electrical Works. In such instances, a person who is guilty of this offence will be liable:

- On summary conviction to a fine not exceeding €5,000 or a term of imprisonment not exceeding 6 months or to both, or
- On conviction on indictment to a fine not exceeding €15,000 or a term of imprisonment not exceeding 3 years or to both.

## **2.7 Summary**

Section 2 has provided an overview of the CER's current regulatory function with regards to electrical safety, as set out under the 1999 Act (as amended by the 2006 Act). Additionally, this section has highlighted the initiatives undertaken by the CER to develop a regulatory framework for electrical safety, in conjunction with a synopsis of the steps taken by the CER to define Controlled Electrical Works and ultimately moving towards a definition of Restricted Electrical Works. Section 3 outlines the CER's decision regarding the introduction and definition of Restricted Electrical Works.

### 3.0 CER's Decision on the Scope of Restricted Electrical Works

Within the consultation paper (CER/11/077), the CER presented four options regarding the proposed definition of Restricted Electrical Works. The four options regarding the scope of the Restricted Electrical Works are as follows:

- **Option 1: A Broad Definition Approach:** this would involve restricting all Controlled Electrical Works in a commercial and domestic setting to REC's.
- **Option 2: An Intermediate Definition Approach:** this would involve legally restricting the carrying out and certification of all Controlled Electrical Works in a commercial and domestic setting to RECs but allowing for a legal exemption for the Owner & Occupier in a domestic property only.
- **Option 3: A Defined Definition Approach (including work by Owner & Occupier):** this would involve restricting the carrying out and certification of all controlled electrical works in a domestic setting to RECs with no legal exemption for the Owner & Occupier.
- **Option 4: A Defined Definition Approach (excluding work by Owner & Occupier):** this would involve restricting all controlled electrical works in a domestic setting to RECs with an exemption for the Owner & Occupier.

28 responses were received and considered. The CER then published a Proposed Decision Paper (CER/11/177) in September 2011 which proposed option 3. Following a review of the 8 responses to the Restricted Electrical Works Proposed Decision Paper (CER/11/177), the CER decided to adopt Option 3: Defined Definition Approach (including work by Owner & Occupier). The implementation of Option 3 will mean that certain Controlled Electrical Works<sup>17</sup>, as currently defined, in a domestic setting can only be carried out by a REC. There will be no legal exemption for the owner/occupier. However, minor electrical work will remain outside the scope of Restricted Electrical Works.

### 3.1 Definition of Restricted Works

Restricted Electrical Works will cover:

1. the installation, commissioning, inspection and testing of a new Electrical Installation which is fixed, fastened or mounted or otherwise secured so that its position does not change and requires connection or re-connection to the distribution network or the transmission network, as the case may be;
2. the modification, installation or replacement of a Distribution Board including customer tails on either side of the Main Protective Device or of an Electrical Installation in any of the special locations listed in Part 7 of the National Rules for Electrical Installations, as the case may be;

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<sup>17</sup> CER/09/009

3. the installation or replacement of one or more circuits in an Electrical Installation, including the installation of one or more additional protective devices for such circuits on a Distribution Board; or
4. the inspection, testing or certification of, or reporting on, existing Electrical Installations covered by Chapter 62 of the National Rules for Electrical Installations;

in a Domestic Property.

Consequently, Restricted Electrical Works does not include:

- a) Electrical works in potentially explosive atmospheres;
- b) Electrical works in a Commercial Premises setting including MV and HV connection and installations;
- c) Electrical works on a construction site;
- d) Electrical works within exhibitions, shows and stands;
- e) Electrical works on agricultural and horticultural installations;
- f) Electrical works on public lighting and associated cabling;
- g) Minor electrical works including the replacement of an electrical accessory such as a light switch, the replacement or relocation of light fitting where the existing circuit is retained, the provision of an additional socket to an existing radial circuit, or electrical works which do not require the issuance of a completion certificate under Section 9D of the Act.

The CER has removed the category of subsystems from its definition of Restricted Electrical Works for domestic installations. The installation of a subsystem in a domestic property would require a power supply via the distribution board or by adding a circuit. Rather than attempting to provide non exhaustive list of subsystem installations, the CER is of the view that the electrical work which should be restricted pertaining to the installation of subsystems is captured in items two and three above. Minor electrical work will remain outside the scope of Restricted Electrical Works. A Domestic Property is defined in Appendix 2 of this paper.

### **3.2 Rationale for Proceeding with Option Three**

The rationale for the introduction of Restricted Electrical Works, and the pursuit of Option Three (Defined Definition Approach including Owner & Occupier) is based on a range of factors including:

- The scope of Restricted Electrical Works should be clearly established and it is critical that it should be capable of being simply and easily communicated in the interests of ensuring it is understood by the public and, therefore, complied with.

- Restricted Electrical Works shall be confined to those works which are covered by the current Technical Standards/Rules on the basis that they are intended to provide for the safety of persons that may arise in the reasonable use of electrical installations and define the correct requirements for the design, erection, and proper functioning of electrical installations (and other relevant technical rules/standards as appropriate).
- The introduction of Restricted Electrical Works in general increases public safety whereby all Restricted Electrical Works shall be carried out by competent Registered Electrical Contractors (RECs). The work is then certified by the REC with a signed declaration stating that all of the works carried out were carried out to the current relevant technical standards (i.e. National Wiring Rules) and thus reducing the public safety risk<sup>18</sup>.
- The introduction of Restricted Electrical Works will make it illegal for non-RECs to carry out such works. Consequently, if the CER or an SSB receives a complaint from a member of the public regarding an electrical installation which was completed by a non-REC, the CER has the power to take the necessary legal action against the non-REC which could result in a criminal conviction against that person or company.
- The greatest risk of faulty electrical installations is where there are untrained personnel associated with the electrical installation that are not subject to any form of regulation. This risk is greatest with respect to electrical installations in a domestic setting where untrained personnel, be they homeowners or unregistered contractors, can carry out Controlled Electrical Works in an existing electrical installation that does not require a new connection to the electricity network by the DSO. It is reasonable to assume that it is in this area that untrained individuals may attempt to carry out electrical work. In a Commercial setting the legal responsibility is placed on employers to ensure that they engage or employ competent parties to carry out the work required. However there is no equivalent regulation or enforcement of electrical work in the Domestic setting. Due to this, it is considered reasonable to restrict all Controlled Electrical Works in domestic premises to RECs (but allowing for a limited amount of Minor Electrical Works to be exempt from the regulations developed).

Given that the approach to restricting electrical work is based on a graduated approach, namely, introducing a defined scope in the first instance and then in the longer term a decision could be taken to possibly move, following consultation, to a broader definition of Restricted Electrical Work. The introduction of the decision outlined in this paper will not impose significant resource costs on the SSBs as both organisations are already experienced in carrying out inspections and dealing with complaints in this area.

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<sup>18</sup> Public safety risks associated with non-compliant installations as a result of poor workmanship are fires, burns, electrical shocks, injury and electrocution.

### **3.3 Summary**

Having reviewed responses to the Restricted Electrical Works proposed decision paper (CER/11/077), the CER has decided to adopt Option Three: Defined Definition Approach. Furthermore, the CER will engage with the HSA and relevant industry stakeholders in terms of enforcing the certification of Controlled Electrical Works in a commercial setting and as outlined earlier may in time move to a wider definition of Restricted Electrical Works.

#### 4.0 Summary of Responses to Proposed Decision Paper

Given the diversity of responses to the consultation paper (CER/11/077), the CER decided to issue a proposed decision paper (CER/11/177), to allow for further consultation prior to a final decision paper on the scope of Restricted Electrical Works. During the consultation window of the proposed decision paper, the CER received eight responses to the paper. Within the Proposed Decision document respondents were asked to give their opinions on two questions. Many of the comments referred to Controlled Electrical Works and certification of same which already had been consulted on in 2008.

**Consultation Question 1:** Do you agree with the CER's proposed scope for restricting electrical works within a domestic setting (as outlined in Section 4 ) assuming the CER may in time extend the scope of restricted electrical works to cover certain electrical work in a commercial setting?

##### Respondents' Comments

Sabre Electrical Services Ltd did agree in general with the CER in relation to the scope of Restricted Electrical Works. RECI welcomed the introduction of Restricted Works but expressed a preference for a broader definition of the scope preferring Option 1 (Broad Definition Approach. Schneider Electric favoured Option 4 (Defined Definition Approach excluding work by owner & occupier) citing LV equipment and UPS systems being specialised and falling under the remit of the HSA, this area will not be affected by the proposed decision. The other five respondents did not provide a preference; instead describing specific issues they had with the regulatory regime, these issues are described and dealt with in the section 4.1 below. Aviva did explain that because periodic inspections were covered under all four Options they had no preference. However it's important to note that under CER's decision periodic inspections in a Commercial/Industrial environment would not be affected.

**Consultation Question 2:** Do you agree with the definition of a Domestic property as outlined in Appendix One of the consultation paper?

##### Respondents' Comments

Only 2 of the 8 submissions responded to this question. RECI agreed with the definition on the basis that this is the standard definition in the building regulations and is comprehensive. The HSA did not agree or disagree with the definition; instead they raised the issue of environments which could be classified as a domestic and as a workplace/commercial setting. This issue is dealt with in Section 4.1 of this paper. Please note the CER refined the definition of a Domestic property from the one used in the Proposed Decision paper for the purposes of clarity, while keeping the same scope.

#### 4.1 Additional issues raised by respondents

*Both Aviva and SAFed put forward the point that accredited inspection bodies had at least the equivalent technical skills of those of a REC through years of experience. Also they cited the inspection and certification industries' independence and impartiality of their inspections as opposed to RECs certifying and passing their own work. Schneider Electric outlined that they felt that Periodic Inspections should be excluded from Restricted Works and perhaps Controlled Works, especially for LV Equipment and UPS Systems due to their specialised nature and the vendor specific requirements. Schneider also stated that this also overlaps with maintenance of such equipment in that maintenance should be excluded (on CE Marked Equipment) but this invariably forms part of a Periodic Inspection Programme.*

##### **CER Response**

The proposed decision paper (CER/11/177) outlined that periodic inspections in domestic settings would be classified as Restricted Electrical Works and therefore could only be carried out by Registered Electrical Contractors. Periodic inspections in a commercial environment would continue to be classified as Controlled Electrical Works and require certification in line with the National Wiring Rules. It should be noted that the CER embarked upon a public consultation process in 2008 regarding the definition of Controlled Electrical Works (CER/09/009); the CER did not receive comments of this nature at that time. In arriving at a definition for Controlled Electrical Works, the CER employed a risk-based approach to assess the safety risks associated with each class of electrical works and those works that required Certification by a REC.

The CER fully appreciates the independent inspection and certification industries' role in providing periodic inspections, nevertheless there is a regulatory system in place that is underpinned by statute. For any inspection body to certify that an electrical installation is in compliance with the National Wiring Rules they are required to register with an SSB and issue a Certificate. The carrying out of Periodic Inspections does not mean that a REC certifies their own work but instead means the REC performs a Periodic Inspection on an installation in the same manner as any independent inspection body.

As outlined in the Proposed Decision on the Scope of Restricted Electrical Works paper (CER/11/177), within the current regulatory environment, maintenance work on MV and HV installations, and the assembly of CE marked equipment, CE marked machines and pre-assembled CE marked machines/equipment are not considered Controlled Electrical Works. The CER notes that Original Equipment Manufacturers (in terms of the assembly of CE marked machines and equipment) are the experts in electrical safety in terms of their own equipment, and therefore should not have to become a REC to manufacture, assemble or maintain its equipment.

*Schneider Electric outlined that in the case of owner occupied premises from a cost burden point of view that the requirement for certification should be excluded from the scope of both Restricted and Controlled Works for Commercial / Industrial premises*



*whereby this is currently administered at a practical level, falls within the remit of the HSA and is adequately catered for at present. They stated that additional requirements for certification will only add extra regulatory costs without a tangible outcome.*

### **CER Response**

The HSA has legal responsibility for enforcing Health and Safety in the work place which is governed by the Safety Health and Welfare at Work Act 2005. They do not have a role in enforcing certification of Controlled Electrical Works. At present the majority of new or additional electrical works performed by RECs fall under the definition of [Controlled Electrical Works](#) (See Appendix 2) and so require certification in line with the National Wiring Rules. The CER has not proposed to restrict electrical works in commercial / industrial environments to RECs at this juncture.

*Edina mentioned in regard to the proposed decision document that their main concern is the failure to fully recognise the role and particular skill set of specialist suppliers and manufacturers in the installation of their equipment.*

*Edina described where a project or installation involves the installation of specialist equipment (such as micro generation, PV, wind turbine etc), specialist companies will have in-house engineers and electricians with greater knowledge particular to the risks posed by the equipment and installation in question.*

### **CER Response**

In the case of micro generation such as PV or Wind, it is only the fixed electrical aspect of the installation which falls under the electrical safety regulatory remit. For example the cables feeding back into the installation and protective devices would currently require certification if completed by a REC as this is defined as Controlled Electrical Work. Once Restricted Works commence this work in a domestic premises could only be completed by a REC, but in a commercial premises would remain as Controlled Works.

When Restricted Electrical Works become legally binding, the fixed electrical installation will be required to be installed and certified by a REC up to the micro-generator set within a Domestic premises. For larger installations synchronising to the grid, the DSO have a process in place. This process requires a Declaration of Fitness Certificate in line with the National Wiring rules to be issued by a REC.

*Edina also outlined how the proposed regulations will increase the cost of such energy efficient projects by necessitating the employment of an REC in a project where they have nothing to bring to the project except fulfilment of the specifics of the regulations.*

### **CER Response**

If a micro generator (generator, PV or wind turbine) is being installed in domestic or commercial premises the fixed electrical aspect (protection and cables feeding into the installation) will require certification if completed by a REC. The CER feels that the fixed electrical part of the installation of micro generation equipment in a Domestic premises should remain under the scope of Restricted Works and must be completed by a REC.

Please note this is already required by the DSO if installing an import/export meter for exporting electricity to the grid.

*Sabre Electrical Services Ltd agrees with the CER on the scope of Restricted Works but has one strong objection and that is, why in the section under “controlled electrical works” is the DSO exempt from conforming to the relevant ETCI National Wiring Rules for public lighting installations, when in fact; the DSO in question (ESB Networks) don’t actually do any public lighting installation or maintenance.*

*In context to Public lighting being contained within the remit of Controlled Electrical Works with exemption of lighting operated by the DSO Sabre lighting believe that it would be against competition law to allow a situation where a private contractor had no choice but to adhere to a certain standard and yet a semi-state body was allowed to work to a different standard, that it had set/determined by itself for only itself.*

### **CER Response**

The CERs does not have a role in developing Electro Technical Standards, it does however have a role, via the regulatory scheme, in enforcing such standards. The current edition of the National Wiring Rules does not cover public lighting operated by the DSO, this area is explicitly exempted. Notwithstanding the above the CER understands that all Public Lighting is now operated by Local Authorities and the DSO no longer operates any public lighting, therefore the concern raised by Sabre Electrical Services Ltd will not arise.

*Project Operational Consultancy Ltd stated that to become a REC one only needs to have proof of serving 4 years as an Electrical apprentice and proof of been recognised as an Electrician C/W insurance which can be very basic and payment of administration fee, total cost 800 Euro without even been asked do you have a phase tester.*

### **CER Response**

The Criteria Document (CER/08/071) details the rules and obligations for participants operating within the electrical safety regulatory framework and outlines the required qualifications, equipment required, maintenance of same and conditions an electrical contractor must satisfy in order to become registered. The Criteria Document was publicly consulted upon in 2008. The qualifications outlined therein were deemed appropriate for those operating in line with the National Wiring Rules on the basis that the National Framework of Qualifications level 6 was deemed the appropriate standard against which the necessary qualifications needed for parties to access the scheme was to be measured. In addition to a formal qualification, each REC is required to have completed a recognised Verification and Certification course in the previous 3 years in order to maintain their registration status. If the recognised course that was completed was accredited the renewal period is 5 years.<sup>19</sup>

<sup>19</sup> Unaccredited courses completed from 1<sup>st</sup> July 2013 will not be recognised. However if somebody successfully completed a recognised unaccredited course prior to 1<sup>st</sup> July 2013 it will still remain for 3 years (even if 3 year period ends post 1<sup>st</sup> July 2013).

*Project Operational Consultancy Ltd stated that they believed that RECs need to have suitable experience and should be graded for specific & controlled works such as – Domestic, Commercial, Industrial, Pharmaceutical, Oil & Gas. Stating that RECs must be graded for the works they're competent to carry out.*

### **CER Response**

The current registration category for the REC scheme, which was consulted upon and outlined in the Criteria document, relating to Registered Electrical Contractors is for three registration categories. The Electrical Contractor category covers the main body of RECs. The Associate Contractor category covers maintenance RECs. While the Specialist Contractor category covers contractors carrying out specialised work such as air-con, lifts and refrigeration. As outlined in the proposed decision paper (CER/11/177) the CER may in time expand the scope of Restricted Works to the commercial arena. In doing so the CER will be required to publicly consult upon such a proposal and will consider proposals from the public, at that stage, for different categories of registration and the qualifications needed for access to those categories of registration. However the CER is of the view that the qualifications as set out in the Criteria Document, and consulted upon in 2008, are appropriate for those wishing to register and carry out restricted electrical work in line with the National Wiring Rules in a domestic setting. Also the message to the consumer to always hire a REC when getting electrical work carried out is very clear; a large number of categories could be confusing.

*Project Operational Consultancy Ltd asked how are RECs going to be controlled / monitored to work within the Electrical & Safety guidelines that are set out here in Ireland.*

### **CER Response**

The Criteria Document detailed the rules and obligations for participants operating within the electrical safety regulatory framework. In relation to the control and monitoring of RECs work, both electrical Safety Supervisory Bodies are required to comply with the requirements as stated within the Criteria Document and each REC is inspected at a minimum on an annual basis.

*SAFed described how only one response from 29 supported the proposed option 3 and, therefore, 96.5% of those consulted did not support this option.*

### **CER Response**

19 of the 28 or 68% of the responses received about the Consultation Paper agreed with the introduction of Restricted Electrical Works in some form, while 3 other respondents gave no clear preference. Among the responses received there was a mix of different preferred options depending on the respondents' specific requirements and commercial interests. The CER has clearly outlined its reasons for pursuing Option 3 Defined

Definition Approach (including work by owner & occupier) in order to enhance overall safety.

*SAFed mentioned that the consultation does not appear to acknowledge or recognise the role of the Irish National Accreditation Board (INAB) in assessing competence. They described how it is mandated in the EU Regulation 765/08 on Accreditation and Market Surveillance. They also said that Inspection companies accredited to ISO/IEC 17020 (Inspection Bodies) are acknowledged as being competent to carry out the mandatory inspections of electrical installations, in addition to compliance with other aspects such as independence, impartiality and insurance.*

*SAFed proposed that in addition to those on the 'register', companies, who have demonstrated their competence through accreditation to ISO/IEC 17020, should be granted Registered Electrical Contractor (REC) status without further bureaucracy and cost.*

### **CER Response**

ISO 17020, entitled "General Criteria for the Operation of Various Types of Bodies Performing Inspection", is an internationally recognised standard for the competence of inspection bodies. It is unclear from SAFed's response what qualification criteria are applied for the personnel carrying out such inspections or who is responsible for setting these criteria.

To become a REC a candidate must prove their competency or, in the case of a company, must prove the competency of those carrying out or certifying the work on its behalf by demonstrating that they have served a recognised apprenticeship as an electrician, which resulted in the awarding of a National Craft Certificate; or another suitable electrical award, equivalent to Level 6 or higher on the National Framework of Qualifications; and are required to have successfully completed a recognised course for Testing, Verification and Certification in the previous 3 years. If the recognised course that was completed was accredited the renewal period is 5 years.<sup>20</sup>

*SAFed mentioned that neither RECI nor ECSSAI are accredited certification bodies. The respondent said that both appear to operate as trade associations with members. They also mentioned that there does not appear to be any consideration of the potential conflict of interest between the ESSBs' other commercial interests, their members and the register or how the latter would be separated and safeguarded.*

*SAFed spoke of how it is not clear how the ESSBs will supervise safety when they have no regulatory powers to do so and asked who will they report to? The respondent also said that the CER appear only to have the authority to prosecute persons carrying out*

<sup>20</sup> Unaccredited courses completed from 1<sup>st</sup> July 2013 will not be recognised. However if somebody successfully completed a recognised unaccredited course prior to 1<sup>st</sup> July 2013 it will still remain for 3 years (even if 3 year period ends post 1<sup>st</sup> July 2013).

*works if they are not registered as a REC, whereas the HSA has a wider remit to regulate safe working.*

### **CER Response**

The 2006 Energy (Miscellaneous Provisions) Act, 2006, gave the CER the statutory authority to regulate the activities of electrical contractors with respect to safety. In order to fulfil its regulatory obligations the CER published the Criteria Document (CER/08/071) in 2008. The responsibilities and functions of the two SSBs are set out in the Terms and Conditions of appointment and the Criteria Document. The 2006 Act legally prohibits the SSBs from acting in the capacity of a trade association or performing representative functions. The SSBs are subject to ongoing audit and review by the CER. The CER and HSA gave mutual recognition and cooperation in relation to each other's respective legislative roles. There is already a MoU in place between the CER and the HSA giving effect to this recognition.

*The HSA noted that the intention is that Restricted Works will be confined to "domestic" environments while excluding areas that would be classified as workplaces or commercial. Several environments could be accurately classified as domestic and as workplace/commercial or might be classified as workplace/commercial but deriving their supply from a domestic installation.*

### **CER Response**

A domestic property is specified as the following:

"A dwelling house, flat or maisonette, including:

- i. any surgery, consulting room, office or other accommodation not exceeding 50m<sup>2</sup> in total forming part of it and used in a commercial capacity;
- ii. any part of its out-buildings or curtilage used for non-commercial purposes; or
- iii. its connection to the electricity network;"

In addition to the above, the definition includes the following:

"A caravan or motor caravan intended for habitation purposes including its curtilage, used for non-commercial purposes, excluding electrical circuits and equipment for automotive purposes;"

For clarity, where a supply emanates from a domestic property for an agricultural, or commercial premises, the start of the agricultural/commercial premises (workplace settings) will be from the protective device (Fuse, miniature circuit breaker, RCBO, RCD) onwards to the outbuildings. Please note the CER refined the definition of a Domestic property from the one used in the Consultation and Proposed Decision paper for the purposes of clarity, while keeping the same scope.

*HSA also noted that it is intended that “new installation in special locations as defined in Part 7 (swimming pools, saunas, fountains, caravan parks & marinas) of the current edition of the National Wiring Rules;” be included as Restricted Works. However the HSA stated that “swimming pools, saunas, fountains, caravan parks & marinas” would primarily be located in non-domestic locations so this might be seen as a contradiction.*

**CER Response**

The CER notes the HSA's comment relating to caravan parks and marinas being included within the definition of restricted works as primarily installations located in non-domestic locations and could be viewed as contradictory. On that basis the CER has redefined the definition to the following:

“ of an Electrical Installation in any of the special locations listed in Part 7 of the National Rules for Electrical Installations”

*HSA also mentioned how it is planned to include “ the inspection, testing and certification of existing electrical installations in accordance with the current edition of the National Wiring Rules and to conform with Regulation 89 of SI No 732 of 2007 “. HSA pointed out how SI No. 732 of 2007 only relates to the workplace while the proposed definition of Restricted Works appears to be focussed completely outside the workplace. The respondent believes this should be considered and, if necessary, reworded to avoid confusion.*

**CER Response**

The CER accepts the HSA's comment in relation to the inclusion of conforming to Regulation 89 of SI No 732 of 2007 in the Restricted Works definition. This has been removed from the definition of Restricted Works.

*Aviva pointed out that the comment on page 38 of the document under Issue 7 – "however the CER understands that the function of the accreditation bodies is to ensure that companies providing Periodic Inspection services are adhering to the relevant ISO standards and not the current edition of the National Wiring Rules relating to electrical installations at Low Voltage." is incorrect as demonstrated from the list of standards noted in their response. The respondent also said that in order for a body to retain its accreditation under ISO standards it must clearly demonstrate that it is complying with documented procedures.*

**CER Response**

The CER notes Aviva's point in relation to companies providing Periodic Inspection services adhering to the relevant ISO standards. However as this work is already defined as a Controlled Work, the CER recommends that it is certified by a REC. The

appropriate legal authority for monitoring and inspecting Controlled Work is the CER and by extension the SSBs as provided for under the Electricity Regulation Act 1999 and amended by the Energy (Miscellaneous Provisions) Act 2006.

*Aviva stated that it is illogical to suggest that an accredited body should have to apply to an unaccredited and unregulated body for assessment.*

**CER Response**

The CER appointed the SSBs on a statutory basis. Both SSBs carry out inspections of work carried out by RECs to ensure that the work is carried out in line with the National Wiring Rules. The SSBs, as safety supervisory bodies, do not carry out electrical work and therefore do not carry out inspections of their own work. The SSBs on behalf of the Commission for Energy Regulation independently inspect work that has been carried out and or certified by a REC.

*Aviva stated that the CER appear to be defining in a very specific manner the requirements of a competent person by stating that only a REC can carry out periodic inspections.*

**CER Response**

To become a REC a candidate must prove their competency by proving they have served a recognised apprenticeship as an electrician, which resulted in the awarding of a National Craft Certificate; or another suitable electrical award, equivalent to Level 6 or higher on the National Framework of Qualifications. The Criteria Document (CER/08/071), which details the rules and obligations for participants operating within the electrical safety regulatory framework, outlines the different requirements and this was publicly consulted upon in 2008.

*Aviva mentioned that the document refers only to the current edition of the national rules; however in many instances domestic property installations will be to a previous edition of the national rules. Aviva asked is the CER requesting that all of these properties are updated to the current edition.*

**CER Response**

When referring to the current edition of the National Wiring Rules a transition period existed for the implementation of the latest National wiring Rules (30th September 2009) This meant that all electrical works (installations, Inspection, etc) completed after this date must comply with the 4th Edition. All electrical work carried out before this date is deemed to be compliant insofar as they were carried out and were compliant to the edition of the National Wiring Rules that was current at that time. Also Restricted Electrical Work will not be applied retrospectively.

*Aviva described how as an independently accredited Type A inspection Body Aviva is subjected to rigorous annual external audit (along with their own on-going internal audit) by INAB appointed experts. This ensures their continuing accreditation. The respondent said that requiring Aviva to register as an electrical contractor, which they clearly are not, in order to continue to carry out inspections which it has engaged in for many years adds nothing to the inspection process.*

### **CER Response**

CER fully appreciates the independent inspection industries' role in providing periodic inspections in line with ISO17020. However, in order to be in line with the National Wiring Rules inspection bodies are required to issue the appropriate periodic inspection report (in accordance with the electrical safety regulatory requirements). It is the role of the SSBs to assess whether an organisation involved in the provision of electrical contracting services is in compliance with the current edition of the National Wiring Rules. The scope of Controlled Works (CER/09/009) was publically consulted upon in 2008. CER feels it is appropriate to include periodic inspections as a Restricted Work in domestic premises.

*Aviva mentioned how in the consultation paper for the scope of Controlled Works (CER/08/212) the CER refers to 'Technical Standards' and that this has now changed to 'current edition of the national wiring rules' and it would appear that Restricted Works only apply to domestic property installed to the current edition i.e. domestic property after 2008?*

### **CER Response**

In the Controlled Works consultation paper a footnote on page 13 for 'Technical Rules' explained it is defined as:

"Technical Rules as defined in the Criteria Document as being "...the ETCI "National Wiring Rules", including any current edition of ET101 National Rules for Electrical Installations"

Restricted Electrical Works will only apply to works completed after the enactment of Restricted Works.

*Aviva stated that the CER do not appear to have considered all the risks to the Public in limiting the scope to only the domestic setting. Aviva followed this up by saying the risks associated with electrical installations in commercial settings are much higher. RECI stated that they believe that moving to a wider definition of restricted works in due course must be the objective especially since many of the exclusions concern areas that are accessible to the public and hence pose a heightened risk.*

### **CER Response**



The CER focused on Restricted Electrical Works in a domestic setting initially because it is of the view that the greatest risk of faulty electrical installations is where there are untrained personnel associated with the electrical installation that are not subject to any form of regulation, this is presently the case in the domestic setting. An example of this occurring would be where untrained personnel, be they homeowners or unregistered contractors, can carry out electrical work in an existing domestic electrical installation that does not require connection to the electricity network by the DSO. Going forward the CER will liaise with the HSA, IBEC and other industry bodies to discuss any potential implementation of a wider definition of Restricted Electrical Works into the commercial environment.

*RECI agree with the CER's finding that there is a widespread lack of knowledge of controlled works and that this is the major issue in electrical safety regulation.*

**CER Response**

Following meetings with industry participants, business representatives and the Restricted Electrical Works consultation process there is evidence to suggest that there is some lack of awareness among the commercial sector of the CER's regulatory requirements for electrical safety and in particular the requirement for certification of Controlled Electrical Work, a common example being a large scale businesses (with in-house electricians) in general not being aware of the current regulatory regime and in particular the requirement to issue certificates for Controlled Electrical Works when completed by a REC. The CER will engage with the HSA, IBEC, Training providers and other industry bodies to discuss the progression of the certification of Controlled Electrical Works in a commercial setting (at first instance), prior to any potential implementation of Restricted Electrical Works in a commercial environment. The CER may in time move to a wider definition of Restricted Electrical Works.

## **5.0 Summary**

The CER's Consultation Paper presented the CER's proposals for the definition of the scope of Restricted Electrical Works (CER/11/077). Given the diversity of responses, the CER issued a proposed decision paper, to allow for further consultation prior to a final decision paper on the scope of Restricted Electrical Works. After reviewing the responses to the consultation and proposed decision papers, the CER is defining Restricted Electrical Works in a domestic setting only (i.e. Option 3: Defined Definition Approach with no legal exemption for the Owner Occupier).

The approval of the regulations regarding the introduction of Restricted Electrical Works by both Houses of the Oireachtas means it will be illegal for any person other than a REC to carry out such works after the enactment date. In such instances, a person who is guilty of this offence will be liable:

- On conviction on indictment to a fine not exceeding €15,000 or a term of imprisonment not exceeding 3 years or to both, or
- On summary conviction, to a fine not exceeding €5,000 or a term of imprisonment not exceeding 6 months or to both.

The CER has set an enactment date of 1st October 2013 for Restricted Electrical Works.

## **Appendix One: Definition of Restricted Electrical Works**

Under Option 3: A Defined Definition Approach (including work by Owner & Occupier); this would involve restricting the carrying out and certification of all Controlled Electrical Works in a domestic setting to RECs with no legal exemption for the Owner & Occupier. However, minor electrical work would remain outside the scope of Restricted Electrical Works.

Restricted Electrical Works will cover:

1. the installation, commissioning, inspection and testing of a new Electrical Installation which is fixed, fastened or mounted or otherwise secured so that its position does not change and requires connection or re-connection to the distribution network or the transmission network, as the case may be;
2. the modification, installation or replacement of a Distribution Board including customer tails on either side of the Main Protective Device or of an Electrical Installation in any of the special locations listed in Part 7 of the National Rules for Electrical Installations, as the case may be;
3. the installation or replacement of one or more circuits in an Electrical Installation, including the installation of one or more additional protective devices for such circuits on a Distribution Board; or
4. the inspection, testing, certification or reporting of existing Electrical Installations covered by Chapter 62 of the National Rules for Electrical Installations;

in a Domestic Property.

Consequently, Restricted Electrical Works does not include:

- a) Electrical works in potentially explosive atmospheres;
- b) Electrical works in a Commercial Premises setting including MV and HV connection and installations;
- c) Electrical works on a construction site;
- d) Electrical works within exhibitions, shows and stands;
- e) Electrical works on agricultural and horticultural installations;
- f) Electrical works on public lighting and associated cabling;
- g) Minor electrical works including the replacement of an electrical accessory such as a light switch, the replacement or relocation of light fitting where the existing circuit is retained, the provision of an additional socket to an existing radial circuit, or electrical works which do not require the issuance of a completion certificate under Section 9D of the Act.

The CER has removed the category of Subsystems from its definition of Restricted Electrical Works for domestic installations. The installation of a Sub system in a domestic property would require a power supply via the distribution board or by adding a circuit. Rather than attempting to provide non exhaustive list of subsystem installations, the CER is of the view that the electrical work which should be restricted pertaining to the installation of subsystems is captured in items two and three above. Minor electrical work will remain outside the scope of Restricted Electrical Works.

## **Appendix Two: Definition of Domestic Property**

Domestic Property means<sup>21</sup>:

- (a) A dwelling house, flat or maisonette, including:
  - i. any surgery, consulting room, office or other accommodation not exceeding 50m<sup>2</sup> in total forming part of it and used in a commercial capacity;
  - ii. any part of its out-buildings or curtilage used for non-commercial purposes; or
  - iii. its connection to the electricity network;

Or

- (b) A caravan or motor caravan intended for habitation purposes including its curtilage, used for non-commercial purposes, excluding electrical circuits and equipment for automotive purposes.

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<sup>21</sup> Please note the CER refined the definition of a Domestic property for the purposes of clarity, while keeping the same scope.

### **Appendix Three: Definition of Controlled Electrical Works**

Controlled Works are major electrical installation works (including additions, alterations and/or extensions) which are covered by the National Wiring Rules and which involve:

1. the installation, commissioning, inspection, and testing of a new fixed electrical installation requiring connection or reconnection to the electricity network;
2. the installation or replacement of a Distribution Board or Consumer Unit, or new installation in special locations as defined in Part 7 of the National Wiring Rules ET101 and ET105;
3. the installation or replacement of one or more extra circuits in an existing installation, including the installation of one or more additional protective devices for such circuits on a distribution board;
4. Subsystems installed in Commercial, Industrial, and Domestic installations where the installation falls within the remit of the National Wiring Rules;
5. The inspection, testing and certification of existing electrical installations (in accordance with Chapter 62 of the Wiring Rules (ET 101 –Fourth Edition- 2008 and to conform with Regulation 89 of SI No 732 of 2007).