



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

Decision on the Scope of Controlled Electrical Works in relation to lifestyle choice Prepayment Meters – Clarification Note

In October 2015, the CER published its Decision on the Scope of Controlled Electrical Works in relation to lifestyle choice prepayment meters. This decision was subsequently postponed while issues raised by industry regarding certification of these works were resolved.

The CER is today 21 April 2016 providing clarity on its Decision on the Scope of Controlled Electrical Works in relation to lifestyle choice prepayment meters:

1. The CER's decision to expand the definition of Controlled Electrical Works so that the installation and/or removal of lifestyle choice prepayment meters fall within the scope of Controlled Electrical Works remains.
2. The only change to the decision published below relates to certification of the works. The decision paper below indicates that Certificate No. 1 should be used to certify these works and that the CER would review the suite of certificates to ensure they were fit for purpose.
3. The CER has developed a new completion certificate, Cert No. 3, that will replace the use of Cert No. 1 and Cert No. 2 for Controlled Works 2, 3, 4 and 5 (including subsystems) and that can be used for Minor Works.
4. **The installation, modification or removal of a lifestyle choice prepayment meter falls within the scope of Controlled Works 2. This means that from 23 May 2016 these works require certification, using Completion Certificate No. 3.**
5. Certificate No. 3 will be available for Registered Electrical Contractors to purchase from Safe Electric from 9 May 2016.
6. Cert No. 1 (<50 kVA) or Cert No. 2 (>50Kva) is still required for Controlled Works No. 1. i.e. those works requiring a DSO connection.

If you have any questions regarding the purchase of Certificate No. 3 please contact Safe Electric: 01-4929966 or www.safeelectric.ie.



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

Regulation of Electrical Contractors with respect to Safety:

Decision on the Scope of Controlled Electrical Works in relation to lifestyle choice prepayment meters

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Abstract

This paper outlines the CER's decision to expand the scope of Controlled Electrical Works to include the installation and/or removal of lifestyle choice prepayment meters. Since October 2013 it is illegal for a non-Registered Electrical Contractor (REC) to carry out the installation and/or removal of a lifestyle choice prepayment meter in domestic premises. This decision, which will take effect on 1st January 2016, is in response to the increase in the installation of lifestyle choice prepayment meters and the identification of a variety of safety concerns with these installations. Implementation of this decision means that these works now also require certification, using completion certificate No. 1, under the regulated electrical contractors' scheme Safe Electric. The inclusion of these works within the scope of Controlled Electrical Works will help to address the safety issues identified as:

- Copies of certificates returned to the RECs safety supervisory body (SSB) for these works will be validated, providing an important safety check.
- The submission of these certificates to the SSB will provide traceability to these installations.

From 1 January 2016, RECs will be required to certify the modification, installation or replacement of a Lifestyle Choice Prepayment Meter, in domestic premises, using the existing completion certificate No. 1 (<50Kva).

In advance of this date the CER and the SSBs will communicate this new requirement via their respective websites and directly with REC's. The CER encourages RECs to start issuing completion certificate No. 1 (<50Kva) for this work, in advance of 1 January 2016.

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:

- Consultation on the Scope of Controlled Electrical Works in relation to lifestyle choice prepayment meters (CER/15/108).
- Regulation of Electrical Contractors with respect to Safety from 2016 (CER/14/790)

- Criteria for the Regulation of Electrical Contractors - Electrical Safety Supervisory Criteria Document, Version 2.0 (CER/13/098)¹.
- Decision on the Scope of Restricted Electrical Works (CER/13/147).
- Definition for the Scope of Controlled Electrical Works (CER/09/009).
- Vision for the Regulation of Electrical Contractors with respect to safety (CER/07/203).

¹ The Commission may amend the Criteria Document from time to time as the Commission may deem appropriate.

Executive Summary

Under the Electricity Regulation Act 1999 (the “Act”), as amended by the Energy (Miscellaneous Provisions) Act 2006 (the “2006 Act”), the CER was designated with the statutory function to “regulate the activities of electrical contractors with respect to safety”.

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 determines the obligations to be placed on any parties carrying out such works.

Specifically, the 2006 Act introduced the concept of Controlled Electrical Works and 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 regulatory system (Safe Electric scheme) for Registered Electrical Contractors (RECs).

Under this function the CER defined “Controlled Electrical Works” (CER/09/009) in 2009 which are electrical works that must be certified if completed by a REC. The CER subsequently defined “Restricted Electrical Works” (CER/13/147) in 2013 which are electrical works which can legally only be carried out by a REC and must be certified.

The installation of lifestyle choice prepayment meters began in late 2010. In more recent years, the number of these devices being installed has increased significantly with more electricity suppliers offering this service recently². The installation of these devices did not fall within the scope of Controlled Electrical Works and as such these works have not necessarily required a completion certificate to issue.

In response to the increase in the installation of lifestyle choice prepayment meters and the identification of a variety of safety concerns including; poor quality connections, reverse polarity and incorrect cable types and sizes, the CER recently published a consultation paper (CER/15/108) on the matter. This paper outlined the need to ensure such meters are installed by competent electrical contractors to the required technical standards and that there is a system of traceability in place. The CER invited comments on its proposal to change the scope of Controlled Electrical Works, to include the installation/removal of lifestyle choice prepayment meters. This decision paper outlines the CER’s decision to redefine the scope of Controlled Electrical Works as (changes are highlighted in bold):

“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 Prepaypower, Pinergy and Electric Ireland.

2. **the modification**, installation or replacement of a Distribution Board **including customer tails on either side of the Main Protective Device**, 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 and to conform with Regulation 89 of SI No 732 of 2007).”

Following implementation of this decision, RECs will be required to certify the modification, installation or replacement of a Lifestyle Choice Prepayment Meter, in domestic premises, using the existing completion certificate No. 1 (<50Kva).

The system of certification is integral to the success of the electrical regulatory scheme. It provides a link from the REC to the customer and assurance to the customer that electrical work has been carried out in line with the appropriate standards. The CER acknowledges that completion certificate No. 1 is a more expensive certificate than the minor works certificate. However, in developing this decision the CER has carefully considered the associated costs of this requirement in the context of the safety benefits that can be achieved through the system of certification. The Minor certificate is a two part certificate, as such there is not a copy of the certificate to be returned to the RECs SSB for validation. The inclusion of these works within the scope of Controlled Electrical Works and the requirement to issue completion certificate No. 1 will add the following benefits:

- Copies of certificates returned to the RECs safety supervisory body (SSB) for these works will be validated, providing an important safety check.
- The submission of these certificates to the SSB will provide traceability to these installations.

The CER has, with industry, reviewed the current suite of completion certificates under the regulated electrical contractor’s scheme and will in time introduce necessary changes to ensure these completion certificates remain efficient, practical and economical.

It should be noted that a lifestyle choice prepayment meter device is different from the ESB Networks (ESBN) Pay As You Go (PAYG) meter. The lifestyle choice prepayment meter device is installed by a REC, on behalf of an electricity supplier, while an ESBN PAYG meter is installed by ESBN in cases where a customer is shown to be in genuine

financial hardship. The installation of an ESNB PAYG meter falls outside the scope of the National Wiring Rules ET101 and hence is not included within the scope of Controlled Electrical Works.

This decision will take effect on 1st January 2016. From 1st January the modification, installation, removal or replacement of a lifestyle choice prepayment meter, in a domestic setting must be certified using completion certificate No. 1. For clarity, where a customer chooses to have a lifestyle choice prepayment meter installed and then removed at a later date a completion certificate No. 1 will be required at both stages of the process; installation and removal.

In advance of this date the CER and the SSBs will communicate this new requirement via their respective websites and directly with REC's.

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1.0 Introduction

1.1 The Commission for Energy Regulation

The Commission for Energy Regulation (CER) is Ireland's independent energy and water regulator. The CER was established in 1999 and now has a wide range of economic, customer protection and safety responsibilities in energy. The CER is also the regulator of Ireland's public water and wastewater system.

The CER's primary economic responsibilities in energy cover electricity generation, electricity and gas networks, and electricity and gas supply activities. As part of its role, the CER jointly regulates the all-island wholesale Single Electricity Market (SEM) with the Utility Regulator in Belfast. The SEM is governed by a decision-making body known as the SEM Committee, consisting of the CER, the Utility Regulator and an independent member. The overall aim of the CER's economic role is to protect the interests of energy customers. The CER has an important related function in customer protection by resolving complaints that customers have with energy companies.

In 2014 the CER was appointed as Ireland's economic regulator of the Irish public water and wastewater sector.

The CER's core focus in safety is to protect lives and property across a range of areas in the energy sector. This includes safety regulation of electrical contractors, gas installers and gas pipelines. In addition the CER is the safety regulator of upstream petroleum safety extraction and exploration activities, including on-shore and off-shore gas and oil.

1.2 Purpose of this paper

The purpose of this paper is to outline the CER's decision regarding the scope of Controlled Electrical Works in relation to lifestyle choice prepayment meters, to clarify the rationale for the decision, respond to comments received and outline the next steps.

1.3 Comments Received

The CER received seven submissions to the consultation paper (CER/15/108), and would like to thank all respondents for their comments. The CER has considered fully the responses received to the consultation paper. Responses to these submissions are dealt with in Section 4. Submissions were received from the following organisations:

- Electrical Contractors Safety & Standards Association (Ireland) Ltd (ECSSAI);
- Electric Ireland;
- ESB Networks;

- Registered Electrical Contractors of Ireland (RECI);
- Sierra Support Services Group;
- South Dublin County Council;
- SSE Airtricity.

1.4 Structure of this paper

This paper is structured as follows:

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.

Section 3: Outlines the CERs decision on the Scope of Controlled Electrical Works in relation to lifestyle choice prepayment meters.

Section 4: Outlines CERs response to comments received.

Section 5: Outlines the CER's next steps.

Appendix A: Definition of Controlled Electrical Works and associated certification.

2.0 Background of Controlled Electrical Works

2.1 Introduction

The objective of this section is to provide an overview of the present electrical safety regulatory framework in Ireland. Specifically, this section outlines the concept of Regulated Electrical Works, and the process undertaken by the CER in order to arrive at an appropriate definition for Controlled Electrical Works.

2.2 Background & Context to the Regulation of Electrical Works

Pursuant to the implementation of the Energy (Miscellaneous Provisions) Act 2006 (the “2006 Act”), 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 to ensure that defined electrical installations are carried out by competent electrical contractors to the required Technical Standards.

Consequently, in November 2007, the CER published a Vision Document (CER/07/203), which provided a blueprint for the creation of the regulatory model for electrical safety. Subsequent to the publication of the Vision Document, the CER published the Criteria Document (CER/08/071) in 2008, which detailed the rules and obligations for participants operating within the electrical safety regulatory framework. Additionally, in October 2008 the CER designated the Electrical Contractors Safety and Standards Association Ireland Ltd (ECSSAI) and the Register of Electrical Contractors of Ireland Ltd (RECI) as the electrical Safety Supervisory Bodies (SSBs), with responsibility for regulating the activities of electrical contractors on a day to day basis for a period of seven years³. The CER committed to evolve the electrical contractors safety scheme over time as required.

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 determines 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 electrical safety regulatory scheme ([Safe Electric](#)).

Controlled Electrical Works are electrical works that must be certified by the issuance of a completion certificate. Under Sections 9D (13) and (14) of the 1999 Act (as

³ This seven year period will end on 31st December 2015.

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 that are examined and certified by an Inspector of an SSB.

Restricted Electrical Works are defined as major electrical work in a domestic setting that legally only a REC can carry out. Under regulatory requirements, Restricted Electrical Works must also be certified. The scope of these works was set out in 2013 in the Decision on the scope of Restricted Electrical Works (CER/13/147). Restricted Electrical Works restrict the carrying out and certification of all Controlled Works in a domestic setting to RECs. Parties that carry out Restricted Electrical Works, but are not registered with an SSB, will be subject to prosecution⁴.

The CER when defining Regulated Electrical Work recognised that a certain amount of Do-It-Yourself (or “DIY”) electrical installation work is a feature of electrical installations in Ireland and generally involves “like for like” replacements of switches, sockets, lighting fittings and/or additions to an existing circuit. These types of work are referred to as **Minor Electrical Works**. Although it is not a legal requirement that Minor Electrical Works be completed by a Registered Electrical Contractor, it is important that Minor Electrical Works are in compliance with the National Wiring Rules.

Minor electrical works remain outside the scope of Restricted Electrical Works⁵. The CER recommends certifying Minor Electrical Works but it is not compulsory (unless a customer requests a cert from a REC for Minor Works carried out). A REC may purchase a book of Minor Works certificates from their registration body. The CER recommends that if customers have any doubts in relation to getting Minor electrical works carried out that they should hire a REC.

2.3 Controlled Electrical Works

In order to facilitate the introduction of Controlled Electrical Works, the CER published a decision paper (CER/09/009) in 2009, which outlined the scope of Controlled Electrical Works, as follows:

- i. the installation, commissioning, inspection, and testing of a new fixed electrical installation requiring connection or reconnection to the electricity network;
- ii. 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;

⁴ S.I. No. 264 of 2013

⁵ See CER document CER/13/147 for definition of minor electrical works.

- iii. 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;
- iv. Subsystems installed in Commercial, Industrial, and Domestic installations where the installation falls within the remit of the National Wiring Rules;
- v. 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).

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 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 low voltage installations, it should be noted that the definition of new connections is such that it includes new connections at MV and HV (Medium Voltage and High Voltage), and therefore require certification by a REC. It should also be noted that electrical systems in Potentially Explosive Atmospheres, and Public Lighting and associated cabling (with the exception of lighting that is operated by the DSO) are within the scope of Controlled Electrical Works as these are the subject of ET105 and ET101 respectively.

2.3.1 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), 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 giving traceability and accountability.

For all new installations that require connection to the electricity network, a copy of the completion certificate is submitted by the REC to their respective SSB for processing and evaluation. Once approved by the SSB, the relevant details on the completion

certificate are then submitted to the Distribution System Operator (DSO i.e. ESB Networks). The DSO, on foot of receipt of the specific details taken from the certificate, will make supply available to the customer.

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. For all other electrical installations that a REC undertakes, a completion certificate must also be issued to the customer and a copy submitted to their respective SSB for processing and evaluation. Once approved by the SSB, the relevant details on the completion certificate are archived against that REC. The introduction of Restricted Electrical Works in 2013 means that most electrical work carried out in domestic premises must be undertaken by a REC, and in turn if this falls under the scope of Controlled Works must be certified. Where the scopes of Controlled and Restricted electrical works deviate, there is a gap whereby electrical work would have to be completed by a REC but there would not be a requirement for certification.

The installation of lifestyle choice prepayment meter devices falls within the scope of Restricted Electrical Works however their installation was not envisaged when the original scope of Controlled Electrical Works was defined. As such, to date the installation of lifestyle choice prepayment meters has not required a completion certificate to issue.

The CER published a consultation paper outlining its proposal to extend the scope of controlled works to bridge this gap between Controlled and Restricted works with regard to lifestyle choice prepayment meters. The CERs decision on this matter and response to comments received are provided below.

3.0 CER Decision on the scope of Controlled Electrical Works

The objective of this section is to outline the CERs decision on the changes to the scope of Controlled Electrical Works. These changes are in response to the installation and/or removal of lifestyle choice prepayment meters in homes and the CER's concerns to ensure such work is carried out in line with required standards.

The CER received seven responses to its consultation paper on the Scope of Controlled Electrical Works in relation to lifestyle choice prepayment meters (CER15108). Following a review of the responses to the consultation paper the CER has decided to implement the proposed changes as outlined in the paper. The implementation of these changes means the modification, installation, removal or replacement of a lifestyle choice prepayment meter, in a domestic setting now falls within the scope of Controlled Electrical Works as well as Restricted Electrical Works. This work can only be carried out by a REC and must now be certified using the existing completion certificate Cert No. 1.

The requirement to certify these works will take effect on 1st January 2016. In advance of this date both SSBs will communicate this requirement with their REC's. This decision does not impact the current requirement for RECs to certify all other works within the scope of Controlled Electrical Works.

CERs response to comments received are outlined in Section 4.

3.1 *Definition of Controlled Electrical Works*

The CER has redefined Controlled Electrical Works as:

“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 modification, installation or replacement of a Distribution Board including customer tails on either side of the Main Protective Device, 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 and to conform with Regulation 89 of SI No 732 of 2007)."**

3.2 Certification of Controlled works

The expansion of the scope of Controlled Electrical Works to cover this area means that the modification, installation, removal or replacement of lifestyle choice prepayment meters, in a domestic setting can only be carried out by a REC and the work must be certified using completion certificate No. 1.

Under current requirements RECs are required to issue completion certificate No. 1 (<50kVA) or No. 2 (>=50Kva) for Controlled works 1. 2. and 3. The modification, installation or replacement of lifestyle choice prepayment meters now falls within the scope of Controlled Electrical Works part 2. In line with these requirements RECs are now required to issue a completion certificate Cert No. 1 (<50kVA) when installing, modifying or replacing a Lifestyle Choice Prepayment Meter, in a domestic setting. **The requirement to issue completion certificate No. 1, for this work will take effect on 1st January 2016.** The SSBs will only accept completion certificate No. 1 for work of this nature completed from the 1 January 2016.

The CER acknowledges that completion certificate No. 1 is a more expensive certificate than the minor works certificate which is currently being used by many RECs to certify these works. However, given the safety issues identified in relation to lifestyle choice prepayment meters the CER is of the view that completion certificate No. 1 is a more appropriate certificate for these works. The system of certification is integral to the success of the electrical safety regulatory scheme. It provides a link from the REC to the customer and assurance to the customer that electrical work has been carried out in line with the appropriate standards. The expansion of the scope of Controlled Electrical Works to cover this area and the requirement to issue completion certificate No. 1, a four part certificate, will ensure that a copy of the completion certificate be issued to the customer and a copy submitted to their respective SSB for processing and evaluation. This scenario is shown below in figure 1.

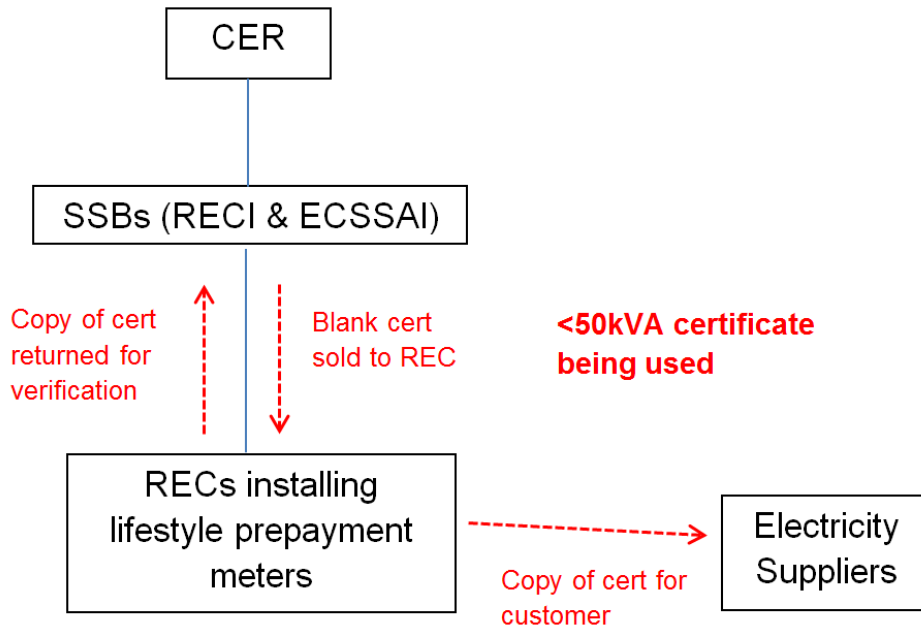


Figure 1: Controlled Works including installation of lifestyle choice prepayment meters.

The CER with industry has reviewed the current suite of completion certificates to identify areas of improvement. The CER will also take the comments received in this consultation process regarding existing completion certificates into consideration when implementing any changes to completion certificates, but will engage with stakeholders as relevant.

In the interim RECs are required to continue utilising completion certificates No. 1 and No. 2 for all Controlled Works, as required. From 1st January 2016 RECs are required to utilise completion certificate No. 1 for the modification, installation, removal or repair of lifestyle choice prepayment meters.

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.

3.3 Rationale for Decision

The installation of lifestyle choice prepayment meter devices was not envisaged when the original scope of Controlled Electrical Works was defined in 2009 (CER/09/009). In late 2010 the installation of lifestyle choice prepayment meters began and the number of these devices being installed has increased significantly in recent years. Their installation was captured within the scope of Restricted Electrical Works in 2013

(CER/13/147). This means that this work can legally only be carried out by a REC but to date has not required a completion certificate to issue. Despite this many RECs have been using Minor type certificates (Declaration of Compliance with ET101 for Minor Electrical Installation Works) to certify the installation of these devices. This is reflected in a 257% increase (to 67,600) in the sale of Minor type certificates in 2013. A large part of the significant increase in sale of minor certificates during 2012 and 2013 is due to the installation of electrical lifestyle choice prepayment meters. The number of electricity suppliers offering this service has also increased. These devices provide customers with a pre-payment facility to purchase electricity.

The typical layout of where a lifestyle choice prepayment meter is installed is illustrated below in figure 2. The lifestyle choice prepayment meter is installed downstream of the customer's main isolation / over-current device inside the customer's premises.

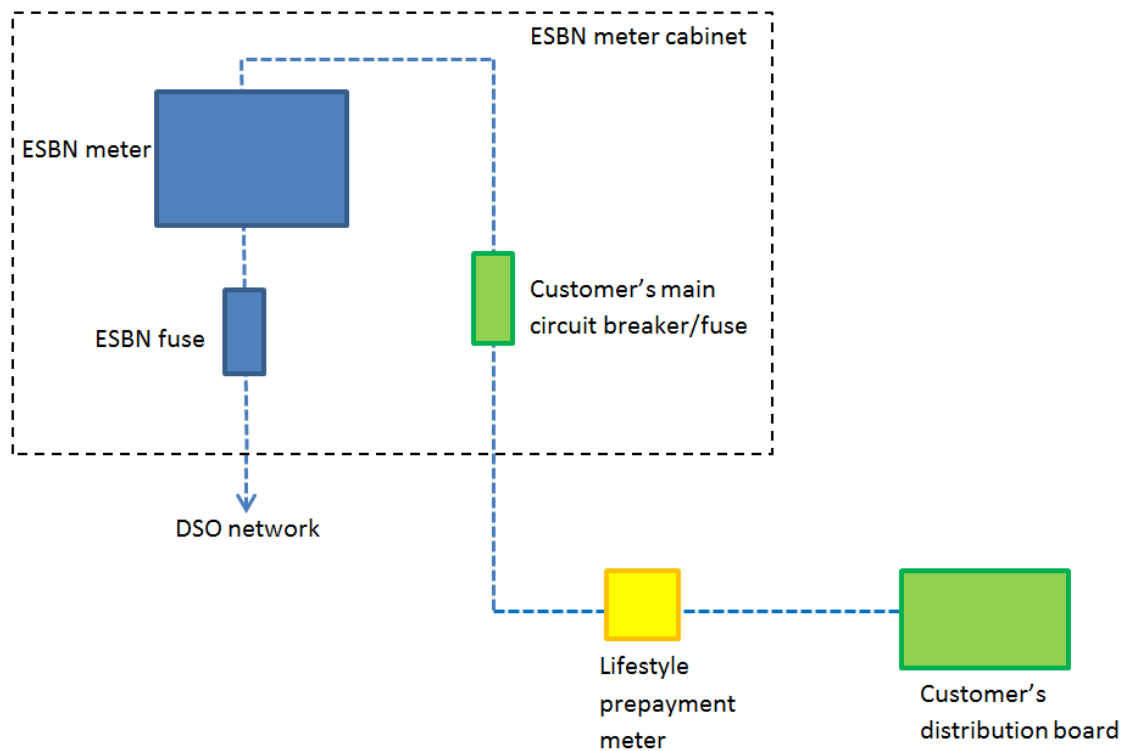


Figure 2: Typical layout of lifestyle choice prepayment meter installation

It should be noted that a lifestyle choice prepayment meter device is different from the ESB Networks (ESBN) Pay As You Go (PAYG) meter. The lifestyle choice prepayment meter device is installed by a REC, on behalf of an electricity supplier, while an ESBN PAYG meter is installed by ESBN. These ESBN PAYG meters are installed in cases where a customer is shown to be in genuine financial hardship. The installation of an ESBN PAYG meter falls outside the scope of the National Wiring Rules ET101 and are not included here.

When a REC issues a minor certificate they keep one copy of the Minor certificate and provide the second copy to its customer. The Minor certificate is a two part certificate, as such there is not a copy of the certificate to be returned to the RECs SSB for validation. The carrying out of electrical work in relation to lifestyle choice prepayment meters misses out on this important safety check, whereby the SSB validates the submitted certificate ensuring the values entered fall within the permissible ranges.

So in this scenario there is no easy way to follow up on a report of work by a REC which may not be considered in compliance with the National Wiring Rules (ET101). This is because there is no record of the completed certificate held within the SSBs to allow them to follow up on the REC.

Electrical installations which are not installed correctly may potentially present safety 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 system in place or poor connection which may not be apparent to the user, may allow the system to operate normally but present a risk of fire or electrocution on a continuous basis. The submission of a completion certificate No. 1 by the installing REC to their SSB will reduce these risks by ensuring that the different test results recorded are validated helping to increase the safety of installations. Also the submitted certificate will provide traceability allowing the SSB identify which installations were carried out by which RECs for future reference.

The CER acknowledges that completion certificate No. 1 is a more expensive certificate than the minor works certificate however, the system of certification is integral to the success of the electrical regulatory scheme. It provides a link from the REC to the customer and assurance to the customer that electrical work has been carried out in line with the appropriate standards. This allows the customer to have peace of mind when they hire a REC to carry out work as it demonstrates that the work has been carried out in compliance with the relevant standard.

3.4 Summary

The CER has extended the scope of Controlled Electrical Works to include the installation, repair, removal and replacement of lifestyle choice prepayment meters, in a domestic setting. This means these works can only be carried out by a REC and the work must now be certified.

From 1 January 2016 RECs will be required to certify the modification, installation or replacement of a Lifestyle Choice Prepayment Meter, in domestic premises, using the existing completion certificate No. 1 (<50Kva).

For clarity, this means that where a customer chooses to have a lifestyle choice prepayment meter installed and then removed at a later date the REC will be required to

issue a completion certificate No. 1 at both stages, installation and removal, of the process.

The SSBs will communicate this new requirement with REC's in advance of this decision taking effect on 1 January 2016. In the interim the CER encourages RECs to make the switch to completion certificate No. 1 when carry out this work.

The CER continues to review the electrical completion certificates to ensure they are as efficient, practical and economical as possible. The CER will communicate with the industry with regard to any changes made to the completion certificates.

This decision does not impact the current requirement for RECs to certify all other works within the scope of Controlled Electrical Works.

4.0 Responses Received to Proposed changes

The CER received 7 responses to its consultation paper on proposed changes to the scope of Controlled Electrical Works in relation to lifestyle choice prepayment meters. While most of the respondents were supportive of the CER's proposed expansion of the definition of Controlled Electrical Works a number of comments made are addressed below. All responses received are published alongside this decision paper.

Respondent Comments on Minor Certs

ECSSAI put forward the point that the existing Minor Certificate is not suitable for the certification of these works as it is only a two part certificate and therefore a copy is not provided to the SSB. Sierra Support Services suggested an alternative solution would be for a copy of the minor certificate to be returned to the SSB.

CER Response

The CER agrees that the existing minor certificate is not suitable for the certification of these works. The minor certificate is a two part certificate and therefore there is not a third copy for returning to the relevant SSB. The system of certification is integral to the success of the electrical regulatory scheme and without a third copy there is not a link from the REC to the customer. Therefore the CER has decided that RECs should use completion cert No. 1 when undertaking works related to lifestyle choice prepayment meters.

Respondent Comments on Completion Cert 1

ECSSAI and SSE Airtricity are of the view that the existing completion certificate No. 1 is not suitable for the certification of these works on the grounds of cost and because it does not provide for the recording of both pre and post installation tests measurements.

CER Response

The CER notes the points made with regard to the cost of completion certificate No. 1. The CER accepts Cert No. 1 is a more expensive but more suitable certificate for a number of reasons including; the use of Cert No. 1, which is a four part certificate, allows for the recording of necessary information and will ensure traceability and accountability. The system of certification is integral to the success of the electrical regulatory scheme. It provides a link from the REC to the customer and assurance to the customer that electrical work has been carried out in line with the appropriate standards. This allows the customer to have peace of mind when they hire a REC to carry out work as it demonstrates that the work has been carried out in compliance with the relevant standards. Cert No. 1 is required to be validated by the SSB whereas the Minor Works

Cert is not. With effect from 1st January 2016 RECs must issue completion certificate No. 1 (<50Kva) when installing, removing or replacing a lifestyle choice prepayment meter, in a domestic setting. The CER continues to review and monitor the suite of completion certificates to ensure they are as efficient, practicable and economical as possible and considers that, for the interim, Cert No.1 will ensure the installation of meters meet the minimum standard and are recorded by RECs. It is currently a requirement for RECs to issue Cert No. 1 for similar work that falls within the scope of Controlled Works.

RECs will now be required to install and certify electrical installations, including lifestyle choice prepayment meters, to the National Wiring Rules for Electrical Installations; currently ET101: 2008. Within these rules RECs are required to carry out pre and post testing and certification. All test results should be recorded in the standard 'test record sheet', available to RECs through their respective SSB. The current test record sheet also allows for the recording of all relevant data such as Customers Name & Address, MPRN, serial numbers, along with REC details.

RECs are required to carry out a visual inspection on an existing installation prior to the commencement of any additional/remedial works taking place and if the REC witnesses any hazardous electrical installations they shall note these hazards along with recommendations to rectify the works onto a Periodic Inspection Report and issue a copy of this report to their Customer while also retaining a copy for future record.

Additional testing requirements to that outlined in ET101:2008, set out by private vendors, is outside the remit of the CER. However suggestions for additional testing and certification requirements can be raised with the relevant electrical technical committee. The scope of the technical committee includes the preparation of wiring rules, codes of practice and guides dealing with electrical installations up to 1000V, and interpretation of the rules when requested.

It is worth noting that the CER continues to review the electrical completion certificates to ensure that they are as efficient, practical and economical as possible. The CER will communicate with industry with regard to any changes made to the completion certificates.

Respondent Comments on New Certs

Sierra Support Services and Electric Ireland expressed concerns about the installer certifying the entire installation and outlined the importance of limiting the responsibility of the REC to the work carried out in modifying, installing or removing the lifestyle meter only.

ECSSAI is of the understanding that completion certificate No. 1 confirms full compliance of the entire installation with the National Wiring Rules. ECSSAI do not believe requesting RECs to provide details in the comments box are sufficient.

ECSSA and Electric Ireland also proposed designing a certificate specifically for the installation or removal of pre-pay meters.

CER Response

Currently, Controlled Works 1, 2 & 3 require the issuance of a completion certificate while Controlled Works 4 requires the issuance of a Subsystem Certificate and Controlled Works 5 requires the issuance of a Periodic Inspection Report. The CER is of the opinion the modification, installation or replacement of lifestyle choice prepayment meters fall under the classification of 'Major Alteration to an existing installation' as laid out in the National Wiring Rules for Electrical Installations: ET101: 2008 which requires the issuance of a completion certificate. The scope of Controlled Works has been expanded to include the installation or removal of lifestyle choice prepayment meters within Controlled Works 2 which requires the issuance of a completion certificate No. 1. Please see Appendix A for details of which completion certificate must be issued for each aspect of Controlled Works.

The existing completion certificate No. 1 has the facility for the REC to explain the nature of the installation being undertaken be it a complete installation or part thereof. The qualified certifier (QC) completing the certificate can explain in both the description section and comment section the exact detail of the installation being certified.

RECs are required be competent and assessed through accredited providers, who also provide accredited assessment (and training if required) for QCs to maintain their status. Within this assessment QCs are assessed on the completion of test record sheets and of completion certificates. This gives CER confidence that RECs and their QCs can complete the documentation to the correct standard.

Notwithstanding the above the CER continues to review the current suite of electrical completion certificates to ensure they are as efficient and practical as possible. While this is the case, from 1st January 2016 RECs are required to issue completion certificate No. 1 when installing, removing or replacing a lifestyle choice prepayment meter, in a domestic setting.

Respondent Comments on Sub System Certs

Sierra Support Services Group outlined their interpretation of the CERs proposed expansion to the scope of Controlled Works to be that compliance would be achieved through the issuing of a sub system certificate.

CER Response

The CER would like to clarify that this interpretation of the expansion of the scope of Controlled Works is incorrect. The installation of lifestyle choice prepayment meters is now included within the scope of Controlled Works No. 2. Controlled Works 1, 2 & 3

require the issuance of a completion certificate, Controlled Works 4 requires the issuance of a Subsystem Certificate and Controlled Works 5 requires the issuance of a Periodic Inspection Report.

The CER is of the opinion the installation or removal of lifestyle choice prepayment meters fall under the classification of 'Major Alteration to an existing installation' as laid out in the National Wiring Rules for Electrical Installations: currently ET101 – 2008 and requires the issuance of a completion certificate. From 1st January 2016 RECs are required to issue completion certificate No. 1 when installing, removing or replacing a lifestyle choice prepayment meter, in a domestic setting.

Respondent Comments on Safety Issues

SSE Airtricity put forward the view that the modification, installation or replacement of lifestyle choice prepayment meters do not create any "additional safety concerns" on the distribution board with the biggest risk that can occur being "reverse polarity". They suggest that concerns around reverse polarity could be resolved by implementing a formal written agreement around testing as an alternative to certification.

ESB Networks outlined issues they have encountered with lifestyle pre-payment meter installation that can lead to serious safety implications.

CER Response

The CER acknowledges that there have been issues in relation to the installation of prepayment meters, as noted by ESNB where lifestyle choice prepayment meters were installed. Issues have not been limited to reverse polarity but also include; poor quality connections, the extension and final terminations of main tails at lifestyle choice prepayment meter, incorrect cable types and sizes being utilised, incorrect connections at the lifestyle choice prepayment meter such as supply in & load out wired in reverse, reverse polarity at customers' premises and direct contact issues.

These issues can lead to serious electrical safety concerns such as burned out connections, phase reversals, and has the potential to lead to fire, injury or fatalities.

The purpose of the certification process, and the issuance of the completion 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, which includes the polarity checks (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 giving traceability and accountability.

4.1 Summary

Having reviewed responses to the consultation on the Scope of Controlled Electrical Works in relation to lifestyle choice prepayment meters (CER/15/108), the CER has decided to extend the scope of Controlled Electrical Works to include the modification, installation or replacement of lifestyle choice prepayment meters, in a domestic setting.

It is illegal for any person other than a REC to carry out this work and **from 1st January 2016 RECs are required to certify the installation, repair or replacement of lifestyle choice prepayment meters, in a domestic setting using completion certificate No. 1 (<50Kva).**

This decision does not impact the current requirement for RECs to certify all other works within the scope of Controlled Electrical Works.

5.0 Next steps

This paper has outlined the CERs decision to expand the scope of Controlled Electrical Works to include the modification, installation or replacement of a lifestyle choice prepayment meter and the requirement on RECs to issue a completion certificate No. 1 (<50Kva) for this work with effect from 1st January 2016.

In advance of this date the CER and the SSBs will communicate this new requirement via their respective websites and directly with REC's. In the interim the CER encourages RECs to make the switch to completion certificate No. 1 when carry out this work.

The CER will continue to review the current set of electrical completion certificates with a view to ensuring they are fit for purpose and as cost efficient as possible. The CER will communicate with industry regarding any changes to the suite of completion certificates.

Appendix A Definition of Controlled Works and Associated Certification

The CER has redefined Controlled Electrical Works as:

“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 modification, installation or replacement of a Distribution Board including customer tails on either side of the Main Protective Device, 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 and to conform with Regulation 89 of SI No 732 of 2007).”**

The required certification for each area of the controlled works definition is as follows:

| Area of Controlled Works Definition | Required Certification |
|--|--|
| Controlled works 1 | Completion Cert 1 / cert 2 (depending on kva rating) |
| Controlled works 2 | Completion Cert 1 / cert 2 (depending on kva rating) |
| Controlled works 3 | Completion Cert 1 |
| Controlled works 4 | Subsystem Cert |
| Controlled works 5 | Periodic inspection report (PIR) |