		SECTION :	3.3
Drocoduros manual	Increation & Audit Procedure	PAGE	Page 1 of 21
Procedures manual	Inspection & Audit Procedure	ISSUE :	6
		DATE	04/9/2014

#### **Definitions and Abbreviations:**

- CER: Commission for Energy Regulation
- REC: Registered Electrical Contractor
- ETCI: Electro-Technical Council of Ireland
- CPES: Common Performance Evaluation System
- FETAC: Further Education and Training Awards Council
- DSO: Distribution System Operator

#### Audit:

Refers to the review of the procedures and processes carried out by the REC in order to ensure compliance with the requirements placed upon it by the CER Criteria Document, other requirements as specified by the Rules of RECI, and/or the CER, and/or any directions further to a Disciplinary Procedure.

#### Inspection:

Refers to the inspection of the electrical work carried out by Registered Electrical Contractors (RECs). Such inspections include the following:

- Inspections with respect to Registration
- Announced Inspections and Unannounced Inspections of the work of the RECs
- Inspection further to a complaint received by RECI concerning the work/activities of an REC

#### Information to RECs

Details of the Audit & Inspection procedure and the Common Performance Marking Scheme (CPES) must be made available to an REC before an Audit & Inspection takes place. The REC must also be advised that he/she must provide copies and/or original if appropriate of requested documentation. He/she must make available an appropriate person from the organisation to answer any questions in relation to the documentation and give details of third parties who may need to be contacted to verify relevant information.

#### **Types of Inspection:**

All inspections are carried out against the current ETCI Wiring Rules ET 101:

- R Routine monitoring inspection
- A Application inspection
- F Follow up inspection
- C Inspection arising from a complaint
- T Spot inspection
- S Special inspection
- CC Change of Contractor

		SECTION :	3.3
Drocoduros manual	Inspection & Audit Procedure	PAGE :	Page 2 of 21
Procedures manual	Inspection & Audit Procedure	ISSUE :	6
		DATE :	04/9/2014

#### 1 Annual Inspection & Audit Programme:

- 1.1 RECI shall produce each year an Annual Inspection & Audit Programme.
- 1.2 This programme shall detail the frequency of inspections and the total number of inspections and audits which will be carried out during the following year. Each REC is to be inspected at least once annually.
- 1.3 The Programme shall include provision for planned audits and/or inspections, inspections as a result of complaints and re-visits to check on corrective actions as a result of a previous inspection and/or audits. The Programme shall also provide for unannounced inspections to be carried out.
- 1.4 The programme shall also detail the resources available to RECI to deliver the total number of inspections and audits required.
- 1.5 The programme shall be submitted each year to the Commission for Energy Regulation for approval.
- 1.6 The programme shall demonstrate that it:
  - (a) covers a reasonably representative cross-section of RECs;
  - (b) covers a representative range of installation types;
  - (c) was developed on the basis that each REC must be inspected at least once annually;
  - (d) meets targets specifically set by the Commission for Energy Regulation; and,
  - (e) represents an effective and efficient use of the Body's inspection resources.
- 1.7 The Programme is amended in line with any changes requested by the CER.

The Audit and Inspection frequency as set out in the programme shall be further to the Risk Monitoring System. However as a minimum until the Risk Monitoring System has been in operation for an appropriate period the programme shall provide as follows:

- (a) For full RECs a minimum of one inspection per annum
- (b) For new RECs -
  - (i) Where such party has not been previously registered with RECI a minimum of one (1) inspection in the first six months shall be carried out. RECI shall not authorise that a new REC may commence to certify works (i.e. have self-certification rights) unless it has first successfully passed one inspection and complied with any requirements specified further to that inspection. In the event that a new REC passes their first inspection, he/she shall then be subject to an additional inspection by RECI, within 6 months of the first inspection.
  - (ii) Where such party has been previously registered with RECI and/or has the requisite prior experience (as determined by RECI), RECI may grant the entitlement to self-certify but shall ensure that a minimum of one (1) inspection is carried out within the first six months of registration.

#### 2. Risk Monitoring System for RECs

2.1 The RECI Inspection and Audit Programme is mainly based on each REC being inspected at least once annually.

- 2.2 Other factors affecting the risk profile of a REC and which are taken into consideration:
  - New REC
  - REC not inspected in previous year(s);
  - Previous inspection was an audit only;
  - Poor inspection results from previous inspections (annual, complaint or any other inspection type)
  - REC not returning non-conformance notices arising from previous inspections;
  - REC not returning post connection test certificates.
- 2.3 RECI reserve the right to impose higher registration fees or direct inspection fees/charges on RECs which require a higher level of monitoring (inspection/audit) on the basis of the increased costs associated with such higher levels of monitoring. This shall be subject to the approval of the Commission in accordance with the requirements of the Criteria Document.

#### 3 Inspection and Audit Personnel

- 3.1 In line with the requirements of the Inspection and Audit Programme, RECI shall ensure that it has sufficient number of qualified individuals for the purposes of carrying out inspections and audits.
- 3.2 Inspectors and Audit Personnel are selected on the basis of their competence, training, qualifications and experience in line with the requirements of the Criteria Document.
- 3.3 Inspections, as defined in this document, are only carried out by RECI inspectors.
- 3.4 Audits, as defined in this document, may be carried out by the inspector or alternatively may be carried out independently of electrical installation inspections by administrative staff.
- 3.5 The qualifications required for appointment as an Inspector are:
  - (a) Technical qualifications not less than those of an electrician (e.g. National Craft Certificate recognised by FETAC or equivalent plus recognised apprenticeship as an Electrician);
  - (b) Experience of/responsibility for electrical installation work for not less than three years;
  - (c) Fully conversant with the Technical Rules, the Building Regulations, Health and Safety legislation as appropriate, the DSO's "National Code of Practice for Customer Interface" and any such other relevant legislation, standards and documentation as may be specified by RECI or the Commission; and,
  - (d) Successful completion of a Safe Pass and Manual Handling Course (and renewals as required); and,
  - (e) Qualified on recognised Verification and Certification. The qualification for the recognised Verification and Certification Course shall have been awarded in the three (3) years prior to appointment; and,

Such other qualifications/accreditations, as the Commission may determine, within such timeframe as may be specified.

3.6 With respect to parties carrying out Audits on behalf of the RECI, such personnel should have completed an Audit course run by a Quality System accrediting body.

		SECTION :	3.3
Brocoduros monual	Inspection 8 Audit Drosodure	PAGE :	Page 4 of 21
Procedures manual	Inspection & Audit Procedure	ISSUE :	6
		DATE :	04/9/2014

#### 4. The Audit & Inspection Report

The Audit & Inspection Report was developed under the Common Performance Evaluation Scheme (CPES). The Report is split into three Forms:

- R07A: Audit Report
- R07B: Inspection Report
- R07C: Inspection Report continuation sheet to record additional breaches.

The Report Forms detail the installation inspected and records any observations and results from individual inspections and/ or audit activities and colour codes awarded if any. An Audit & Inspection Report shall be completed for each Inspection.

#### 4.1 Audit Report

The Audit shall establish that the REC complies with the Technical Rules and the Regulatory Arrangements.

The Audit Report (R07A – See Appendix 1) is made up of four pages: the top page for the Contractor, the 2<sup>nd</sup> page for the RECI office, the 3<sup>rd</sup> page to be retained by the Inspector and the Back page (Non-Conformance Notice) to the REC in case non-conformances have been identified.

#### 4.1.1 Contents

The Audit Procedure involves the review and assessment of the following records and documentation of the REC:

(a) Test Equipment: Availability, condition and calibration of test instruments and calibration records should be checked. Serial numbers of instruments should be recorded.

<u>Note</u>: When the serial numbers of the REC's test instruments are entered into the data base, the IT system will inform the user if the same serial numbers have already been entered for another contractor. In this case further investigation must be carried out.

- (b) Reference Documents: Check that REC has the current edition of Wiring Rules (including later Amendments) and any other technical documents necessary for work being undertaken.
- (c) Controlled Works Certification: The visiting inspector should have a record of the completion certificates purchased by the REC during the year and the addresses of the installations for which they were used. The inspector should select the installation to be inspected himself from this list rather than accepting whatever installation the contractor proposes. Check that test record sheets are available for each completion certificate and that they are satisfactory. Check that no originals remain in the contractor's file. These should have been submitted to the consumer. Check that post connection copy has been sent to RECI.
- (d) Training: record RECI courses that have been attended since the last inspection.

		SECTIO	N :	3.3	l
Procedures manual	Inspection & Audit Procedure	PAGE	:	Page 5 of 21	
Procedures manual	Inspection & Audit Procedure	ISSUE	:	6	l
		DATE	:	04/9/2014	

(e) Persons carrying out electrical work: The inspector must confirm the name(s) of the Principal Duty Holder and the Qualified Certifier or Certifiers to update RECI's records. Qualified Certifiers must be checked that they have a valid QC No i.e. they have attended a Verification & Certification course in the last three years. Qualifications of other electricians employed by the REC should be examined.

#### Notes:

Co-operation with Auditor/Inspector: the REC must make his records available for inspection and facilitate inspection of a suitable installation.

The inspector can examine the contractor's records of completion certificates, test record sheets, qualifications etc at his office. Alternatively it is acceptable for the contractor to bring all his records to the site which is being inspected.

#### 4.1.2 Filling the Audit Report

- (a) The Inspector checks each item of the Audit Form and ticks the relevant "Yes" box if compliant or the colour coded "No" box if not compliant.
- (b) If Audit only because the REC has no installation that can be inspected, the tick-box "Audit Only" is ticked.
- (c) Any non-conformance found is automatically recorded on page 4 of the Audit Report (see Appendix 1A) i.e. the Audit Notice of Non-Conformance. The REC is required to confirm the rectification of the non-conformance(s) within 30 working days.

#### 4.2 Inspection Report

The Inspection Report (Form: R07B – See Appendix 2) is used to document the installation that has been inspected and to record any breach of the E101 wiring rules.

The report is made up of 4 pages: the top page for the REC, the 2<sup>nd</sup> page for RECI office, the 3<sup>rd</sup> page to be retained by the Inspector and the back page (Inspection Non-conformance Notice) for the REC in case Inspections breaches have been identified.

#### 4.2.1 Contents

The following main items (and their sub-items as listed on the report form) listed on the Inspection Report should be checked:

- (a) Supply Interface
- (b) Earthing and Bonding
- (c) Earth Arrangements
- (d) Supplementary / Extraneous
- (e) Distribution boards and protection devices
- (f) Wiring system
- (g) Accessories, Fittings & Equipment
- (h) Outcome of random sample testing (\*)
- (\*) With **supply isolated** the following tests should be carried out (using a wander lead): continuity of earthing conductor, continuity of main and supplementary bonding. All class

1 fittings, switch boxes and ceiling roses. Check for fly earths in socket boxes. Test for continuity of ring circuits, test for polarity.

- With the **supply restored** the following tests should be carried out: Fault loop impedance tests on all circuits and readings checked against the readings on the tests record sheet. RCD tests on all RCDs and RCBOs and the tripping times checked against the reading times on the test record sheets.

#### Note:

Quality of Equipment & Material Used: Wiring Rule 133.1 specifies the requirements for the use of material and accessories in terms of compliance with I.S., EN, IEC or ISO standards. In signing a completion certificate a REC confirms that the materials used in the electrical installation comply with this requirement. The inspectors visual inspection cannot confirm this but the REC should be asked about the quality of materials used and provide back-up documentation if requested. If substandard materials were clearly used the installation and the REC should be subjected to follow-up action.

#### 4.2.2 Filling the Inspection Report

- (a) The Inspection Report contains a list of items to be checked. When proceeding with the inspection of the installation, the inspector ticks the relevant box in each line as a proof that the item has been checked (or not). Each breach of the wiring rules is recorded at the bottom section of the report with the rule number and a description. A continuation sheet (Form: R07C See Appendix 3) is used when more than 10 breaches have been identified.
- (b) A colour code is assigned to each breach, red for high risk, amber for medium risk and yellow for low risk. The code assignment is carried out as per Procedure 3.5 Performance Marking and Risk Monitoring.

<u>Note</u>: Any breach in the section "Outcome of Random Sample Testing" will automatically attract a red code.

(c) Any breach found is automatically recorded on page 4 of the Inspection Report i.e. the Inspection Notice of Non-conformance. The inspector records on the NC Notice the date by which the breaches have to be rectified and ticks the box "Non-Conformance notice issued".

#### 4.3 Completion of the Audit & Inspection Report

- (a) The Inspector totals the number of colour codes from the Audit and Inspection Reports and records them at the top of the Audit Report Form.
- (b) The Inspector signs both the Audit an Inspection Reports (and the inspection continuation sheet if used) and gets the REC to sign the same forms.
- (c) A copy of the Audit & Inspection Report is given to the REC (Page 1 of Form 7A and Page 1 of Form 7B if an installation inspection took place).
- (d) If Audit Non-Conformances have been identified, the inspector hands over page 4 of the audit report (see Appendix 1A) and reminds the REC to return it dated and signed to RECI office within 30 working days to confirm that the non-conformances have been rectified.
- (e) If Inspection breaches have been identified, the inspector hands over page 4 of the inspection report (see Appendix 3) and reminds the REC to return it dated and signed to RECI office by the date marked on the form to confirm that the listed breaches have been rectified.

		SECTION :	3.3
Brocoduros manual	Inspection & Audit Procedure	PAGE :	Page 7 of 21
Procedures manual	Inspection & Audit Procedure	ISSUE :	6
		DATE :	04/9/2014

#### 5 Inspection Types

#### 5.1 Routine Monitoring Inspection (R)

- (a) The inspector should inspect, as a minimum, a completed installation "Controlled Works" (i.e. the completion certificate for the installation has been signed by the registered contractor) carried out by the contractor during the year.
- (b) Where possible the installations to be inspected should be selected from the print-out (see (e) below). The contractor should not be allowed to select which installation to visit where this is practical.
- (c) Additional inspections of partially completed installations are recommended. It is accepted that it is generally only possible to record breaches of the Wiring Rules when an inspection is carried out on a completed installation.
- (d) A list of contractors due for R inspections in the inspectors' area is produced on a monthly basis in the office and sent to the inspector.
- (e) A print-out of completion certificates purchased by the contractor in the previous year, which also shows the addresses of installations where supply was connected by the ESB is also sent to the inspector. This information helps the inspector to evaluate the contractor.
- (f) The REC is given 7 working days notice in writing of an announced inspection.
- (g) The inspector should visit one or more recent installations carried out by the contractor.
- (h) The number of installations inspected will depend on the size and location of the installation.
- (i) If the Inspection cannot be carried out due to cancellation or non-attendance by the REC, the Inspectors fills Form R23 Short Notice Cancellation or Non-Attendance (See Appendix 8) and sends it to the REC. Details of the cancellation are entered in the RECI data base.

#### 5.2 Application Inspection (A):

- (a) The "A" inspections apply to Applicants.
- (b) The procedure for the use of "A" inspections is detailed in Section 3.2 Registration Procedure.
- (c) When the REC has an installation ready for inspection, he completes an Inspection Request Form (Form R41 – See Appendix 9) and submits it to the RECI office in conjunction with copies of the relevant test record sheets.
- (d) The inspector completes an Audit & Inspection Report (R7) for each installation inspected.
- (e) When sufficient An applicant assessment form (R12) for the applicant and submits them to the Chief Inspector.
- (c) The inspector also records the serial numbers of the applicant contractor's test instruments which will be entered on the database. If the same serial numbers have already been entered for another contractor further investigation must be carried out.
- (d) The applicant must have a copy of the current Wiring Rules.

#### 5.3 Follow-up Inspection Procedure (F):

- (a) These inspections are carried out in respect of following up to ensure that remedial work has been satisfactorily completed by the registered contractor.
- (b) The inspections are normally brief i.e. to check items of remedial work identified as necessary in an earlier inspection.

- (c) It is not the intention in normal circumstances that the installation be completely tested or re-tested when checking completion of remedial work already specified.
- (d) The inspector should notify the contractor of his intention to conduct a follow-up inspection and the contractor should be asked to attend.
- (e) If the contractor does not wish to attend or is not available the inspector should proceed anyway.

#### 5.4 Complaint Inspection Procedure (C):

- (a) This category is confined to inspections required for the processing of consumer, ESB or internal RECI complaints.
- (b) The use of the "C" inspection is described in Section 3.6 Complaints against Contractors.
- (c) The inspection order number will be issued from the RECI office and the extent of the inspection will depend on the nature of the complaint.
- (d) The contractor should be notified in advance of the intention to inspect the installation and be invited to attend.
- (e) If he/she declines the inspection should proceed.
- (f) If breaches of the Wiring Rules are identified these should be itemised on an Audit & Inspection Report (R7) and submitted to the Chief Inspector.
- (g) If necessary an additional descriptive report should be submitted explaining the circumstances of the complaint and the findings of the inspector.

#### 5.5 Spot Inspection Procedure (T):

- (a) In normal circumstances there should be a reason for wanting to put in place a spot inspection.
- (b) A Request for Approval of Inspection form (R16) should be faxed by the inspector to the RECI office in advance (other than in exceptional circumstances) stating why a spot inspection on that particular contractor is necessary/recommended.
- (c) If the inspection is approved and an order number issued, this should be quoted on the inspector's report.
- (d) The inspector should contact or at least attempt to contact the contractor in advance to inform him/her of his/her intention to inspect the installation(s) in question.
- (e) This condition can be waived in the case of construction sites but the inspector should enquire on site if the electrical contractor is around before commencing his inspection.

#### 5.6 Special Inspection Procedure (S):

- (a) This prefix S is for inspections that do not fall into any other category.
- (b) It will usually apply to an investigation other than resulting from a consumer complaint and may be used, typically, to carry out a more thorough inspection following evidence of problems revealed in a spot inspection or some other such lead.
- (c) S inspection orders are normally initiated by the RECI office but an inspector may request the implementation of a special inspection.
- (d) If an inspection is authorised and put in place the inspectors report sheet should quote the S order number.
- (e) Contractors should normally be notified in advance of a special inspection

		SECTION :	3.3
Procedures manual	Inspection & Audit Procedure	PAGE :	Page 9 of 21
		ISSUE :	6
		DATE :	04/9/2014

#### 5.7 Change of Contractor (CC):

- (a) This type of inspection is reserved to installations where the original REC cannot or will not complete the works including certification.
- (b) The process is described in Section 3.17 Change of Contractor Procedure.
- (c) If RECI has approved the change of contractor, the installation should be inspected.
- (d) If the inspector is satisfied that the installation complies with the Wiring Rules, the nominated alternative REC can issue a completion certificate.

#### 6. Notice of Unsafe Works

- (a) Where the Inspector, further to the Inspection of work, discovers what he/she considers to be an unsafe installation that Inspector shall inform the customer or the person responsible for the premises/installation and the REC, by immediately issuing a Hazard Notice (Form R35: Notice of Potential Hazard – See Appendix 5).
- (b) The Inspector shall provide a copy of the Hazard Notice to the customer and the REC.
- (c) The Inspector shall also affix a copy of the Hazard Notice upon the unsafe installation together with a clearly visible warning sign.
- (d) The Hazard Notice shall specify the following:
  - (i) the reason that the Hazard Notice has been issued;
  - (ii) the nature of the unsafe works/installation/situation;
  - (iii) advice that the installation should not be touched by persons other than an REC; and,
  - (iv) advice that the customer should contact an REC as soon as possible in order to ensure that the necessary remedial actions are undertaken.
- (e) The Inspector shall inform RECI head office of any such circumstances immediately and RECI head office shall advise the DSO of the relevant details of the situation.
- (f) In addition to a Notice of Hazard, as referred to above, where the Inspector is of the view that, having encountered or being presented with direct evidence that an electrical installation could reasonably give rise to an immediate and serious threat to health and safety should it be, or remain to be, energised, he/she shall issue an Emergency Works Notice (Form R36: Notice for Emergency Work – Appendix 6).
- (g) The Inspector shall issue an Emergency Works Notice to the customer and the REC and, in so doing, shall arrange for the de-energisation of the installation concerned in accordance with Common Procedure No.5.
- (h) The Emergency Works Notice shall specify that,:
  - (i) In the view of the Inspector, the works poses an immediate danger to health and safety and the reasons therefore
  - (ii) The installation has been de-energised in the interests of health and safety and the Inspector is authorised to do so;

- (iii) A REC should be instructed to carry out emergency remedial works;
- (iv) The installation should not be re-energised until such time as remedial works have been carried out by an REC and, further to same and the requirement of Common Procedure No. 1 Certification, the installation is certified as being in compliance with the Technical Rules;
- (v) To re-energise the installation against the advice listed above may result in injury or death; and
- (vi) The DSO is to be immediately notified of the details pertaining to the present situation.
- (i) The Inspector shall at all times act reasonably and prudently in order to protect health and safety with respect to electrical installations inspected by them in the course of their duties whilst having due regard to the consequences of any action to de-energise an installation.
- (j) Any such actions with regard to this Section shall be further to, and in accordance with, the "Common Procedure No. 5 Enforcement".
- (k) In the event that RECI, further to an Inspection carried out, discovers material breaches of the Technical Rules or the Regulatory Arrangements, RECI shall, in addition to taking appropriate actions relating to the particular installation concerned and the REC who carried out such works, take reasonable measures, as deemed necessary to ascertain the safety of any previous works that were carried out by that REC.

#### 7 Monitoring of Inspections Results

- (a) The inspector enters off-site the results of the inspection carried into the RECI data base.
- (b) Copies of the Audit & Inspection Reports (Pages 2 of Forms R07A and R07B) are sent weekly to the Chief Inspector together with the Inspector's Weekly Report (Form R21 See Appendix 7).
- (c) The Reports are checked for completion, accuracy and for non-conformances / breaches reported. The reports are then filed in the REC's paper file.
- (d) Where necessary the Chief Inspector writes to the REC regarding breaches of the Wiring Rules identified by the inspector.
- (e) When the Non-Conformance Notice is received from the contractor at RECI office, an F inspection order number is issued to the inspector if it is decided to carry out a Follow-Up Inspection.
- (f) The RECI data base monitors the return of Audit and Inspection Non-conformance Notices. If no feedback is received from the REC by the due rectification date, two reminder letters detailing the outstanding non-conformances and / or breaches are automatically sent to the REC. If there is still no feedback after the two reminders, the REC is informed in a final letter that his/her self-certification rights have been removed.
- (g) If the breaches are of a serious nature, a file will be opened as a RECI complaint and entered on the complaints list for regular follow up and possible disciplinary action.
- (h) If the Inspection is an "Audit Only", a flag is set in the IT system to the effect that when the REC submits a conformance certificate for processing, the Inspector will be notified and will contact the REC to arrange an inspection of the corresponding installation.

		SECTION :	
		PAGE	Page 11 of
Procedures manual	Inspection & Audit Procedure	21	
		ISSUE :	6
		DATE :	04/9/2014

#### 7. Reports on Inspection and Audit Programme to the Commission for Energy Regulation:

- (a) The Quarterly Safety and Compliance Reports include the Inspections & Audit Programme.
- (b) In addition to comparing the inspection plan with the actual inspections carried out, the report details the number of inspections of each type carried out during the period analysed, the number and type of colour codes issued from Audit non-conformances and Inspection breaches identified and the number of outstanding defects to be rectified.
- (c) Since the inspection data are stored in the RECI data base, any additional report or trend analysis can be generated on request.

#### Associated Documentation:

- CER Criteria Document CER/13/098 (Version 2.0)
- ET101:2008 National Rules for Electrical Installations 4<sup>th</sup> Edition + Amendments
- CPES Guidance Document
- Form R02: RECI Rules of Registration
- Section 3.3: Registration Procedure
- Section 3.5: Procedure for Performance Marking & Risk Monitoring
- Section 3.6: Complaints Against a Registered Contractor
- Section 3.17: Procedure for Change of Contractor

		SECTION :	3.3
		PAGE :	Page 12 of
Procedures manual	Inspection & Audit Procedure	21	
		ISSUE :	6
		DATE :	04/9/2014

0501
RECH
~

Safety Supervisory Body - Audit Report

Appendix 1

-													Form	1 RU	7A Rev	c 71
Inspector's Name:						Order No:				Date of Ins	pectio	n:	1		1	
Name of REC:										Reg. No.:						
Audit Only	Audi	it and Inspect	ion			Re-Inspectio	on Requ	ired								
			To	tal Evalu	ation	Summary	(Audit	/ Ins	pection)							
Major non-co	onforma	ance		Seriou	s non	-conforman	e			Non-confo	mano	e				
Office Visited:															-	
Test Equipment													Yes		No	
Test equipment available	for ins	pection (Sub-	Clause C	1.2.19.)												
Test equipment calibrate	d (Sub-	Clause C.1.2.	20.) and	calibration	n reco	ords available	e (Sub-	lause	C.1.2.21.)							
Туре	Qty	Make of E	quipmen	nt Present	ed			Ser	ial Numbe	r of Equipme	ent Pre	esente	d			_
Insulation/Cont. Tester																
Loop Impedance Tester																
RCD Tester																-
Multi-Tester (3x1)																_
Reference Documer	nts												Yes		No	
Current ET101 Wiring Ru		able for insp	ection (S	ub-Clause	s C. 1	2.22 & 1.2	23.)									
Controlled Works					-Line		nual						Yes		No/N	ot
(Clouses C. 4.3; 4.4 & 4.5. &	Commo	n Procedure N	0. 1)			_		omn	ents				165		Availat	de
Correct certificates issue	d and re	turned for a	control	led works										4		
Test record sheets availa	ble for i	nspection an	d comple	eted:												
Audit Non conformance	notice is	sued:		Yes		No	To be	retur	ned to REC	l within 30 w	orking	day's				
Inspection Non conformation	ance not	tice issued:		Yes		No 🗌	Worl	s to b	e rectified	ay:	1	1				
Emergency Works and/o Notice Issued:	r Hazaro	Works		Yes		No 🗌	Rea	son:								
Persons Carrying Ou	rt Elec	trical Wor	k						Resp	onsibilities	Fulfi	illed:	Yes		No	
Principle Duty Holder:																
(Sub-Clause C.1.2.5.) Qualified Certifier/s: (Sub	Clause	5												-		
C.1.2.7.:1.2.8; 1.2.10 & 1																
QC Number/s:																
Person(s) in attendance a audit:	at inspe	ction /														-
Comments:																_
comments:																
														_		
This report is confid Commiss		and persono Energy Reg												er th	an the	ť
This Audit has beer test record s															es and	
Signature of Inspect	or:					Signatu	ire of	REC	Represe	ntative:						

Top Page for REC

2nd Page for Office

3rd Page for Inspector

Back Page for REC

		SECTION :	3.3
		PAGE :	Page 13 of
Procedures manual	Inspection & Audit Procedure	21	
		ISSUE :	6
		DATE :	04/9/2014

RECI	Safe	ty Supe	erviso	ory Bod	y - Audi	Non C	onfor	mance	Votice	For	n R07A	Rev: 7
Inspector's Name:					Order No:			Date of Ins	pection:	1	1	
Name of REC:								Reg. No.:			Í	
Audit Only	Aud	it and Inspect	tion	1	Re-Inspectio	n Required						
		,		tal Evaluatio	on Summary		pection)					
Major non-c	onform	ance		Serious no	on-conformanc	æ		Non-confo	mance			
Office Visited:	Yes	No	C	comment:								
Test Equipment										Yes		No
Test equipment available	e for ins	pection (Sub-	Clause C	1.2.19.)								
Test equipment calibrate	ed (Sub-	Clause C.1.2.2	20.) and	calibration re	cords available	(Sub-Clause	C.1.2.21.)					
Туре	Qty	Make of E	quipmen	nt Presented		Se	rial Numbe	er of Equipme	nt Present	ted		
Insulation/Cont. Tester												
Loop Impedance Tester												
RCD Tester												
Multi-Tester (3x1)												
Reference Docume	nts									Yes		No
Current ET101 Wiring Ru	les avai	lable for insp	ection (S	ub-Clauses C	1.2.22 & 1.2.2	3.)						
Controlled Works	Certif	fication	,	On-Lin	e Ma	leun				Yes	No	o / Not
(Clouses C. 4.3; 4.4 & 4.5. &	Commo	n Procedure N	0. 1)			Com	nents			Tes	Av	ailable
Correct certificates issue	d and re	eturned for al	ll control	led works								
Test record sheets availa	able for i	inspection an	d comple	eted:								
Audit Non conformance	notice is	ssued:		Yes 🗌	No 🗌	To be retur	ned to REC	l within 30 w	orking day	s		
Inspection Non conform	ance no	tice issued:		Yes	No	Works to b	e rectified	by:	1	1		
Emergency Works and/o Notice Issued:	or Hazari	d Works		Yes	No 🗌	Reason:						
Persons Carrying O	ut Elec	trical Worl	k				Resp	onsibilities	Fulfilled	: Yes		No
Principle Duty Holder:												
(Sub-Clause C.1.2.5.) Qualified Certifier/s: (Su	Church										_	
C.1.2.7.:1.2.8; 1.2.10 & 1		-										
QC Number/s:												
Person(s) in attendance audit:	at inspe	ction /										
Comments:												
comments.												
		TOE	BE RET	URNED TO	O RECI WIT	HIN 30 W	ORKING	DAY'S				
		100	nfirm th		Conforman s found in th		e been re	ctified.				
								-				
<b>`</b>	ame:_			Signe	d:			te:		_		
Fax/Email or	Post th	is form to F	RECI at:	Unit 9, KCR I	ndustrial Estate	e, Kimmage,	Dublin 12 F	ax No: 01 49	2 9983 Em	nail: info@	reci.ie	
Signature of Inspect	or:				Signatu	re of REC	Represe	entative:				
Ten Dans for DE	~	0				rd Dage f	or Incode	tor		Back Da	an for	DEC

Appendix 1A

Top Page for REC

2nd Page for Office

3rd Page for Inspector

Back Page for REC

		SECTION :		3.3
		PAGE	:	Page 14 of
Procedures manual	Inspection & Audit Procedure	21		
		ISSUE :		6
		DATE :		04/9/2014

nspector's Name			Form R0 Order No: Date of Inspection: /					1														
arme of REC:			Reg. No.:						ŕ	—												
												In stall	tion Certified			1	Mar		\ ~_[	<u> </u>	2	╧
nstallation Vis	rted										-	Installe	ston Certimes	No	<u> </u>	Ļ_	Yes		Pre	-	Post	ᄂ
ame:													MPR	1	0							
ddress:													Compl Cert No									
												Test S	heet Available	- <b>n</b>	5		No					
												Test	Sheet Numbe	-				s	cal No	c		
nergisedt		Yes		No					E	101 Rui	les Ap	plicable	Current Edit	ion		Previo	us Ed	lition			below	cuon w
ategory:		Domestic		4	n	C	mmen	tial		Indust	trial			Othe								
stallation Type:		New	Re	wire	Ad	dition		Re	Conne	ction		NSH	Builde	s Supply	(		Othe	r.			_	
stallation Status:		First Fix		Se	cond F	ix I	ᅮ			In	specti	ion Type			1	Visue	18.9	mole	testin			
	- On and	ng/not ch	~ *				a leas	~	and to 1				d (CKD) does r			-			_	_	Ma	NA
	upply inter			obe to an	110000	13 011 311	a loca (	como	1000				boards and pro	_	_							
		tive device	com	et								_	aly (530.5.4,	_	_	ஏ						
		ce require	ment	s correct								_	boards correct		d (530.	5.128	531.2	.2)				
	58 Seal fitt	ed ns comply s	with C	39.2								_	oad protection on complies w							+		Н
	arthing and		with a	33.2									protective con			d seq	Jence			+		H
	_	tive condu	ctor o	orrect							Wirl	ng Syster	1									
	lain water												core colours									
	tain gas bo						-		Н													
			en bonded Additional mechanical protection provided as required sable for bonding Satisfactory routing of cables				-	Н														
	arth Amang																					
		rode connection accessible and connected IP rating correct																				
		e cable for main earth conductor Local isolation correct					$\square$															
		my / Extraneous Mounting heights correct omply with 544.2.7 Maintenance isolators provided						Н														
			omply with 701.544.04 Outcome of random sample testing																			
		walls and	_	_	ning wi	iring ear	rthed				_		nce satisfacto									
	_	t/switch bo wided on e	_										operating to		param	eters				⊢	_	H
	eeving pro	wholed on a			Rar	ndom S	ample	Test	s Resul	its (base			ilstance satisfi ets provided									-
		Continuity	of P	rot. Cond		-					_		onductor:			Ω						_
Pre-Connecti	on		_				╡						on Resistance	_	_					Polarit	Г	_
		Continuity	OFR	ing ura	15:	L					Min	Insulato	on Resistance	-	_	мΩ				oisni	¥-∟	
Post-Connecti	ion:	Earth Loop	p Imp	edance:			2	Asso	ciated	Protection	ve De	vice		_ OF	eratio	n of R	CDs/R	CBOs	@30n	nA.		
Rule Numb	er								Bre	aches Fi	ound	/ Comm	nents									
										Disclaim									ng to be			
This report has been prepared based partly on visual inspection and partly on random sample tests (where deemed appropriate) of the electrical works. It does not been account of any work assented up or incasculate To the estimat of such supection (which assent all parts of ETIOI) and testing (if applicable) the report anytims that the works as mply with the National Wintig Refer. This report is confidential and personal to REC						ating (if a	applant	blej the	mport o	n and an and	hot the	words and	oply with the No	Sana/Wi	ing Aule	z. This	mport	is confi	dential a	and per	ional	to R
To the extent of such it	and is the antractor involved and may not be used by any third party after than the Commission for Energy Regulation. No Robilly can attach to REC arising from the conduct of any such impection, leating or contamb of the report.																					
To the extent of such it	r Involved or								content	ts of the re	nport.											
To the extent of such it				íes 🗌	No				content	ts of the re		orks to l	e rectified	y:		1		1				

Top Page for REC

2nd Page for Office

3rd Page for Inspector

Back Page for REC

Appendix 2

		SECTION PAGE		3.3 Page 15 of
Procedures manual	Inspection & Audit Procedure	21 ISSUE	:	6
		DATE	:	04/9/2014
				Appendix 3

RECI	Safety Super	visory Body	- Non Confo	rmanc	e Noti	ice	Fo	rm R078	Berr 7
Inspector's Name:		Order No	x:		Date of I	nspection:	1	1	
Name of REC:					Reg. No.	:			Т
Installation Visited			Installati	on Certified:	No	Yes	Pre	Post	Ċ,
•				MPRN	1 0				
Name:			60	mpl Cert No:					
Address:				et Available:	Yes	No			
				eet Number:			Seal No		
Energised:	Yes No	ET	101 Rules Applicable:	Current Editio	an 🗌	Previous Ed	_	(Clarify me	
Category:	Domestic Agri	Commercial	Industrial		Other:			1000	
Installation Type:	New Rewire Addition	on Re-Connec	tion NSH	Builders	Supply	Other			
Installation Status:	First Fix Second Fix		Inspection Type:	Visual On	Y	Visual & Sa	mple testing		
TO BE RETURNED TO RECI BY DATE SHOWN ON AUDIT         REPORT         Non Conformance Notice         I confirm that all non-conformances have been rectified and now comply with the current ETCI regulations.         Name:       Signed:       Date:         Email or Post this form to RECI at:       Unit 9, KCR Industrial Estate, Kimmage, Dublin 12									
			s (based on test sheet						
Pre-Connection:	Continuity of Prot. Conductors:	Max Resis	tance of Protective Cor			_ <u>0</u>			_
	Continuity of Ring Circuits:		Min Insulation	Resistance:		_ΜΩ	F	olarity:	
Post-Connection:	Earth Loop Impedance:	_Ω Associated F	rotective Device		Operat	tion of RCDs/R	CBOs @30m	A	ms
Rule Number			Breaches Found / Co	omments					
	1		Disclaimer				ar coding to be		
To the extent of such impection	zard portly on visual inspection and partly on n (which covers all parts of ETIO1) and itseting i and may not be used by any third party ath	(If applicable) the report as or than the Commission for i	offers that the works comp	y with the Notic	anal Wilting A	tuins. This report is	confidential a	nd personal	to RECI
Non conformance notic	e issued: Yes No		Works to be	rectified b	Y:	1	1		
Signature of Inspector:		Signature of REC /	Representative:	2			Cont	Sheet	
Top Page for R	EC 2nd Page	for Office	3rd Page	for Insp	ector	B	ack Pag	e for R	EC

		SECTION :	
		PAGE :	Page 16 of
Procedures manual	Inspection & Audit Procedure	21	
		ISSUE :	6
		DATE :	04/9/2014
			A

Appe	ndix 4



## Safety Supervisory Body - Inspection Report

		<u>Conti</u>	nuation	<u>Sheet</u>			For	m R07	C s	Nev: 7i
Inspector's Name:			Order No:		Date of Insp	ection:		,	1	
Name of REC:					Reg. No.:					
Rule Numbe	r		Breache	Found / Comments						
									ļ	
								$ \bot$	1	
								$\rightarrow$	1	
							 	+	+	
								+	╇	
								+	╀	
							 	+	╉	+-
							 	+	╉	+
								╉	╉	+
								╉	╈	
								╈	t	+
									T	
									T	
									Ι	
								$ \bot$	1	
								$\rightarrow$	1	
								+	4	
								+	╇	
							 	+	╉	
								+	╉	
							 	+	╉	+
							 	╉	$^{+}$	
								+	t	
								+	t	
							 		T	

Total

Signature of Inspector:

Signature of REC / Representative:

Top Page for REC

Middle Page for Office

Back Page to Inspector

		SECTION :	
		PAGE :	Page 17 of
Procedures manual	Inspection & Audit Procedure	21	
		ISSUE :	6
		DATE :	04/9/2014

#### Appendix 5

# RECI

Electrical Installation Notice of Potential Hazard



Form R35 Version 1

NoHz: xxxxxxx

	BLOCK CAPITALS ONLY	BLOCK CAPITALS ONLY
MPRN:		Inspector's Name:
Address:		Inspection O/N:
		REC Name:
Occupier:		REC No:
Phone:		Mobile Tel:

Reason(s) for issuing the Notice					
Nature of the unsafe works/installation/ situation					
	PY OF THIS NOTICE ADVISING ME OF A DEFECT ON THIS ELECTRICAL MIGHT AFFECT THE SAFETY OF PERSONS OR PROPERTY				
Recipient's signature:	or left in Premises by Signature:				
Inspector's signature:	Date:				
Emergency Works Notic	re issued: YES NO				
METER NUMBER:	METER READING:				
CUSTOMER INFORMATION This notification of Hazard is issued in the interests of the safety of this premise and the persons therein. It has been issued by an SSB Inspector as he/she considers your installation as unsafe. Note the following: • You should contact an Electrical Contractor as soon as possible in order to ensure that the necessary remedial actions are undertaken • You must only use a Registered Electrical Contractor (REC) to rectify the installation					
<ul> <li>For a Registered Electrical Contractor (REC) visit <u>www.safeelectric.ie</u></li> <li>Obtain a Certificate from the Registred Electrical Contractor on completion of the repair</li> </ul>					
<u>Disclaimer</u> This Notice of Potential Hazard is based on the findings of a partly visual inspection and partly random sample tests (where deemed appropriate) of the electrical works. It does not take account of any work covered up or inaccessible. No liability can attach the SSB arising from the conduct of any such inspection, testing or contents of the Notice.					

WHITE - customer

YELLOW - REC

		SECTION :	
		PAGE :	Page 18 of
Procedures manual	Inspection & Audit Procedure	21	
		ISSUE :	6
		DATE :	04/9/2014
			Annanding

#### Appendix 6

Electrical Installation Notice for Emergency Work



Form R36 Version 1

EWN: XXXXXXX

BLOCK CAPITALS ONLY	BLOCK CAPITALS ONLY					
MPRN:	Inspector's name:					
Address:	Inspection O/N:					
	REC Name:					
Occupier:	REC Reg No:					
Phone:	Mobile Tel:					
Details of Emergency Works to be carried out:						
Circuit isolated:	Seal No:					
Full isolation of the electrical installation	Seal NO.					
I HAVE RECEIVED A COPY OF THIS NOTICE REQUESTING E	MERGENCY WORKS TO BE CARRIED OUT AND THE					
INSTALLATION TO BE CERTIFIED						
Recipient's signature:	or left in Premises by Signature:					
Inspector's Signature:	Date:					
	54.67					
This Emergency Works Notice is issued in the interests of been issued by an SSB Inspector as he/she has encounter	CUSTOMER INFORMATION This Emergency Works Notice is issued in the interests of the safety of this premise and the persons therein. It has been issued by an SSB Inspector as he/she has encountered and/or has been presented with direct evidence that the electrical installation gives rise to an immediate and serious threat to health and safety. Note the following:					
• The inspector has isolated the faulty circuit(s) and has						
isolating device to prevent an accidental re-energisatio						
instructed to do so	<ul> <li>Emergency remedial works can only be carried out by a Registered Electrical Contractor (REC) who will be instructed to do so</li> </ul>					
• The installation should not be re-energised until such time as remedial works have been carried out by a REC						
• The installation shall be certified to ensure it complies	with the Technical Rules					
	<ul> <li>To re-energise the installation against the advice listed above may result in injury or death</li> </ul>					
Disc	laimer					
This Notice of Emergency Work is based on the findings of a partly visu appropriate) of the electrical works. It does not take account of any wo						
No liability can attach to RECI arising from the conduct of any such insp						

		SECTION :	3.3
		PAGE :	Page 19 of
Procedures manual	Inspection & Audit Procedure	21	
		ISSUE :	6
		DATE :	04/9/2014

Form R21 Version 2



### STAFF INSPECTORS' WEEKLY REPORT

		Week No.		Starting	
TIME FROM TO	CONTRACTOR	LOCATION	FILE/REG NO.	RECI ORDER NO.	MILEAGE
	TIME       I         FROM       I         I       I	TIME FROM       CONTRACTOR         I       I	TIME	TIME FROM         CONTRACTOR         LOCATION         FILE/REG NO.           Image: Ima	TIME FROM         CONTRACTOR         LOCATION         FILE/REG NO.         RECI ORDER NO.           Image: Strate

Inspectors Signature

		SECTION :	
		PAGE :	Page 20 of
Procedures manual	Inspection & Audit Procedure	21	
		ISSUE :	6
		DATE :	04/9/2014
			Annondix 9

FORM R23 VERSION 2



# SHORT NOTICE CANCELLATION OR NON ATTENDANCE

(complete box 1, box 2 or 3 and box 4)

	County:
Reg. No	
Inspection Order No.:	Scheduled Inspection Date:
Date Appointment Made:	
	2
CANCELLATION	
Date of Cancellation by	/ Letter 🗌 or Phone 🗌
Stated Reason for Cancellation:	
Was alternate appointment made at time of cance	
Yes For (date)	
Or No Reason	
Has this member cancelled in the past?	
No 🗌 Occasionally 🗌 Regularly	
	3
NON ATTENDANCE	
Was alternative appointment made? (following the	e non attendance)
Yes 🗌 For (date)	
Or No 🗌 Reason	
Has this member not attended or cancelled in the	past?
No 🗌 Occasionally 🗌 Regularly	
No 🗌 Occasionally 🗌 Regularly	
No 🗋 Occasionally 🗋 Regularly	4
No Occasionally Regularly	
,	
Is this a second recent cancellation/non attendation/	

#### Appendix 9

Form R41 Version 2

#### **INSPECTION REQUEST FORM**

Electrical Contractor/Electrician	For Office Use Only) Reg/Ref.No
(Block Letters) Address	Order No
	Date Received:
Phone	Remittance Rec'd €
Electrical Contractor  or Electrician  (Tick as appropriate)	Passed to Inspector:

#### INSPECTION DETAILS

(Block Letters) Name of Consumer	
Inspection Address	Phone
Installation Category: Domestic	Commercial  Industrial  Other (Specify)
Type of Premises: (House, Flat, Shop, Of	fice, Factory etc) No. of Bedrooms or Sq.Ft
Type of Installation New  Rewire Addition I	Re-Connection 🗆 NSH 🗆 Temp Supply 🗆 Other 🗆
Electricity Supply: 1 Ph $\square$ or 3 PH $\square$	Metering: Wholecurrent $\Box$ or $\mbox{ C T } \Box$ $\mbox{ Earthing: TN-C-S } \Box$ or $\mbox{ TT } \Box$
Number of Inspections required(or	ne inspection per meter/consumer/letting at same address)
Installation Completed (date)	Inspection Required (date)
Remittance Enclosed: €	(Bank Draft/Postal Order/Monev Order/Credit Card ONLY)

Please confirm that the following tests have been completed (Tick and quote test value where appropriate)

	Test Completed (✓)	Test Value
Continuity of Protective & Bonding Conductors		
Continuity of Ring Circuit Conductors (if applicable)		
Resistance of Longest Protective Conductor		Ohms
Minimum Insulation Resistance (for total installation)		M Ohms
Polarity		
The following apply if power is connected:		
Maximum Fault Loop Impedence		Ohms
Verification of Operation of RCD		

Electrical Contractor/Electrician

I confirm that the above electrical installation has been constructed and completed by me in accordance with ETCI National Wiring Rules and <u>TEST RECORD SHEETS ARE HELD AND AVAILABLE FOR INSPECTION</u>

Signed\_

Date\_\_\_\_

THIS FORM MUST BE COMPLETED AND SIGNED BY THE ELECTRICAL CONTRACTOR/ELECTRICIAN WHO MUST ALSO BE IN ATTENDANCE AT TIME OF INSPECTION. THIS INSPECTION REQUEST FORM SHOULD BE FORWARDED TO RECI AT LEAST <u>10 DAYS BEFORE INSPECTION IS REQUIRED</u>

UNIT 9, KCR INDUSTRIAL ESTATE, RAVENSDALE PARK, KIMMAGE, DUBLIN 12 Phone: 4929966 Fax: 4929983