



**NSAI**

# ANNUAL REPORT 2022

NSAI TECHNICAL COMMITTEES  
(NSAI/ETC/TC 02)

## Contents

1	Chairman's Statement .....	3
2	Introduction .....	4
3	Scope of TC.....	5
4	Structure and Membership .....	6
4.1	Structure .....	6
4.2	Members .....	6
4.2.1	Members NSAI/ETC/TC 02/WG 01 .....	7
4.2.2	Members NSAI/ETC/TC 02/WG 03 .....	7
4.2.3	Members NSAI/ETC/TC 02/WG Queries .....	8
5	Summary of 2022 Activities .....	8
5.1	National .....	8
5.1.1	Meetings NSAI/ETC/TC 02 .....	8
5.1.2	Meetings NSAI/ETC/TC 02/WG 01 .....	8
5.1.3	Meetings NSAI/ETC/TC 02/WG 03 .....	9
5.1.4	Meetings NSAI/ETC/TC 02/WG Queries .....	9
5.1.5	National Work .....	9
5.2	International/Regional .....	10
5.2.1	Meetings .....	10
5.2.2	International/Regional Work .....	10
5.2.3	International/Regional Standards Reviewed .....	10
5.2.4	International/Regional Voting Results .....	11
5.3	Regulatory Development/Update .....	11
6	Irish Publications/Reviews.....	11
6.1	Publications .....	11
6.2	Reviews .....	12
7	Work programme for 2023 onwards .....	13
8	Additional Information .....	14

## 1 Chairman's Statement

The year continued to be a difficult year because of Covid-19, and meetings continued online under the professional guidance of NSAI staff.

The final transition date in relation to I.S. 10101 took place on 31 July 2022. This was the last date for an electrical installation to be pre-connection certified to ET 101. All new electrical installations after this date shall be certified to I.S. 10101. Safe Electric newsletter in [April 2022](#) put out a reminder in relation to this final transition date.

The transition from ET 101 to I.S. 10101 is now complete. All ETCI documents have been withdrawn. A dedicated webpage has been set up on the NSAI website to show the status of all ETCI documents which transferred to NSAI ([ETCI document status | NSAI](#)).

The Chair and Secretary of NSAI/ETC/TC 02 presented at the Electex Trade show in September, and NSAI had a stand at the AECI Trade show in August and the [EV Summit](#) in the RDS in November.

Sales figures for I.S. 10101 reached 14,736 in October 2022.

There has been a significant amount of work carried out by the working groups under NSAI/ETC/TC 02 throughout 2022.

### Working Group (WG1) = Wiring Rules (I.S. 10101)

WG1 met regularly to review existing rules, and to propose amendments or corrigenda. WG1 also reviews forthcoming IEC and CENELEC documents, which will eventually become harmonized documents in the HD 60364 series and will therefore need in future to be incorporated into I.S. 10101.

### Working Group (WG3) = electric vehicles charging

WG3 was established to coordinate suppliers, designers, distributors, contractors and regulatory bodies to review wiring to charging units for electric vehicles. The existing rules in I.S. 10101 emanate from HD 60364 section 722. WG3 have carried out a review of the latest HD 60364 section 722 and reviewed current practice in Ireland. They met regularly throughout the year. WG3 carried out a risk assessment of EV charging systems. They have proposed an amendment to the existing rules in I.S. 10101.

### Working Group (WG Queries)

This WG was established following on from the NSAI/ETC/TC 02 meeting on 15<sup>th</sup> April 2021, to prepare proposed responses to open queries in relation to the national wiring rules. The WG prepare proposed responses which are then considered at the next NSAI/ETC/TC 02 meeting. This WG has streamlined the query process and has allowed the NSAI/ETC/TC 02 meetings to focus more on international standardization matters.

NSAI/ETC/TC 02 on the recommendation of NSAI/ETC/TC 02/WG 03 submitted to the NSAI/ETC committee (email 2022/08/18) the request for an amendment. As no objections were received from NSAI/ETC Committee the proposal for the amendment was submitted to the NSAI board on the 2022/09/16. The amendment includes a revision of Part 722 "Supply of electric vehicles" and the incorporation of Annex 8A "Energy Efficiency" into the main body of I.S. 10101.

This new main part will become Chapter 8 Energy Efficiency and will consist of two sections,

Part 8-1: Functional aspects –Energy Efficiency, and

Part 8-2: Prosumer’s low-voltage electrical installations.

ESB networks presented to NSAI/ETC/TC 02 committee in November on the ESB NNLC Programme (National Networks Local Connection Programme).

A number of NSAI/ETC/TC 02 members are attending the new ETC working group on adjacent HV and LV earthing systems (NSAI/ETC/WG 01).

A good relationship had developed with IET JPEL/64 UK and NSAI/ETC/TC 02. IET JPEL/64 members attend NSAI/ETC/TC 02 online meetings and advise on the progress in relation to UK wiring rules BS 7671. NSAI/ETC/TC 02 members also attend JPEL 64 committee and sub-committee meetings. The relationship with IET JPEL/64 hit a speed bump and work is underway to re-establish this relationship.

Attendance at NSAI/ETC/TC 02 meetings has been high, despite the effect of the Covid-19 virus and the switch to online meetings. Interest and involvement from the electrical industry has grown significantly.

The Business plan for NSAI/ETC/ TC 02 was approved at the February meeting of NSAI/ETC. An action identified in the strategic business plan for NSAI/ETC/TC 02 was to improve Ireland’s attendance at international events, by encouraging membership on IEC and CENELEC committees. There have been improvements in this area throughout the year with a number of members attending international meetings and participating in international committees. The secretary of NSAI/ETC/TC 02 in particular has attended a significant number of meetings throughout the year.

Incoming technical queries relating to wiring rules (emails to [wiringrules@nsai.ie](mailto:wiringrules@nsai.ie)) have been streamlined and the process has been improved with the establishment of the Query WG.

SGS Ltd. has been appointed as the new SSB from January 1<sup>st</sup> 2023. Most RECI staff will transfer over to SGS and continuity of representation for Safe Electric on NSAI committees is expected to remain the same.

Finally, I would like to thank NSAI/ETC/TC 02 Secretary Amanda-Jane Gainford for her guidance and professionalism throughout the year, which has made the role of chair much easier.

Paul Dunne

Chair of NSAI/ETC/TC 02.

## 2 Introduction

NSAI/ETC/TC 02 is responsible for the maintenance and revision of the national standards for electrical installations in residential, commercial and industrial premises up to and including 1kV a.c.. NSAI/ETC/TC 02 also provides interpretation of the rules when requested.

The National Wiring Rules are a national standard. They are recognised in common law as the state of the art and are recognised by the Health and Safety Authority (HSA) as means of complying with the Electricity Regulations. Similarly, ET 101 is cited in the Building Regulations as the electrical installation wiring standards required in order to comply with the statutory requirements. Moreover, ET 101 has formally been recognised by the Commission for Regulation of Utilities (CRU) as the technical rules to be observed by registered electrical contractors (RECs). In 2020 with the publication of I.S. 10101, ET 101 starts to be replaced as the National Rules for Electrical Installations. The [transition period](#) outlined by the CRU for the adoption of I.S.

10101 has now completed and so I.S. 10101 is the National Standard for Wiring Rules for Electrical Installations.

The National Wiring Rules are prepared in consultation with the regulator, the inspectorate, contractors, designers, and a broad range of electrical industry experts. This collaboration ensures that national consensus exists, which is the most important aspect of the work of NSAI/ETC/TC 02. A major feature of the work is the obligation and privilege to participate with both European and international standards bodies, namely CENELEC and IEC. NSAI/ETC/TC 02 engages with CENELEC TC64 and IEC TC64. TC64 being the expert body for "Electrical installations and protection against electric shock". NSAI/ETC/TC 02 works to ensure that Irish concerns are considered during in the creation and maintenance of rules at IEC and CENELEC level. NSAI/ETC/TC 02 is also responsible for the adaption and adoption of the resultant harmonization documents created at this level into the National Wiring rules for Ireland.

### 3 Scope of TC

The primary scope of the committee is to mirror the work of the following international committees:

<b>Committee Name</b>	<b>Committee Title</b>
IEC TC64	Electrical installations and protection against electric shock
CLC TC64	Electrical installations and protection against electric shock

NSAI ETC TC2 is responsible for the development, maintenance and revision of a coherent set of national standards and other deliverables for electrical installations in residential, commercial and industrial premises, including the preparation, maintenance and revision of Standards, dealing with electrical installations up to 1000V.

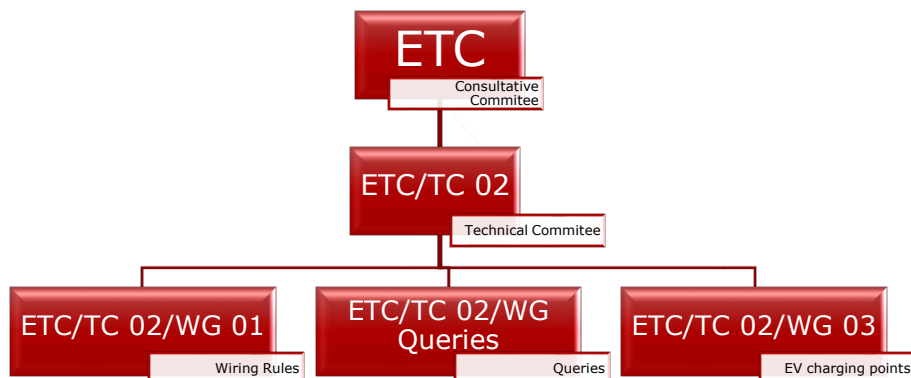
The latest version of the "National Rules for Electrical Installations" I.S. 10101 was published on the 6th of March 2020.

I.S. 10101 specifies the requirements for the design, erection, and verification of low-voltage electrical installations. This Standard is intended to provide for the safety of persons, livestock and property against dangers and damage, which may arise in the reasonable use of electrical installations, and to provide for the proper functioning of those installations.

## 4 Structure and Membership

### 4.1 Structure

The Figure below illustrates the structure of the Committee:



### 4.2 Members

The table below provides the committee members for the year:

Organisation	Role
<b>ACEI</b> Association of Consulting Engineers of Ireland	Committee member
<b>AECI</b> The Association of Electrical Contractors	Committee member
<b>CDETB</b> City of Dublin Education & Training Board	Committee member
<b>CIBSE</b> Chartered Institution of Building Services Engineers	Committee member
<b>CRU</b> Commission for Regulation of Utilities	Committee member
<b>DCC</b> Dublin City Council	Chair
<b>DKIT</b> Dundalk Institute of Technology	Committee member
<b>DSO</b> Distribution Service Operator	Committee member
<b>ECA</b> Electrical Contractors Association in Ireland	Committee member
<b>ECSSA</b> Electrical Contractors Safety & Standards Association Ireland Ltd	Committee member
<b>EMDA</b> Electrical Manufacturers and Distributors Association	Committee member
<b>EIFI</b> Electrical Industries Federation of Ireland	Committee member
<b>EI</b> Engineers Ireland	Committee member
<b>HSA</b> Health & Safety Authority	Committee member
<b>HSE</b> Health Service Executive	Committee member
<b>IET</b> Institution of Engineering & Technology	Committee member
<b>NECI</b> National Electrical Contractors Ireland	Committee member
<b>NSAI</b> National Standards Authority of Ireland	Secretary
<b>OPW</b> Office of Public Works	Committee member
<b>SEAI</b> Sustainable Energy Authority of Ireland	Committee member
<b>Solas</b> Future Education and Training	Committee member
<b>TUD</b> Technical University Dublin	Committee member
Safe Electric	Committee member
John Clare Training	Committee member
<b>Liaison</b> Liaison NSAI/ETC/TC 03	National observer
<b>Liaison</b> Liaison NSAI/ETC/TC 04	National observer

<b>Liaison</b>	Liaison NSAI/ETC/TC 06	National observer
<b>Liaison</b>	Liaison NSAI/ETC/TC 10	National observer
<b>Liaison</b>	Liaison NSAI/ETC/TC 20	National observer
<b>Liaison</b>	Liaison NSAI/TC16/WG5	National observer
<b>Liaison</b>	IET/JPEL 64	Special Observer

## 4.2.1 Members NSAI/ETC/TC 02/WG 01

Organisation	Role
<b>DCC</b> Dublin City Council	Chair
<b>DSO</b> Distribution Network Operator	Committee member
<b>ECA</b> Electrical Contractors Association in Ireland	Committee member
<b>ESBI</b> Electricity Supply Board	Committee member
Engineers Ireland	Committee member
Geoghegan Electrical	Committee member
<b>NECI</b> National Electrical Contractors Ireland	Committee member
<b>NSAI</b> National Standards Authority of Ireland	Secretary
<b>TUD</b> Technical University Dublin	Committee member
Safe Electric	Committee member
<b>HSA</b> Health & Safety Authority	National observer
<b>HSE</b> Health Service Executive	National observer
<b>Liaison</b> Liaison NSAI/ETC/TC 10	National observer

## 4.2.2 Members NSAI/ETC/TC 02/WG 03

Organisation	Role
<b>ACEI</b> Association of Consulting Engineers of Ireland	Committee member
<b>AECI</b> The Association of Electrical Contractors	Committee member
<b>CRU</b> Commission for Regulation of Utilities	Committee member
<b>DCC</b> Dublin City Council	Committee member
<b>DCCAE</b> Department of the Environment, Climate and Communications	Committee member
<b>DSO</b> Distribution Network Operator	Committee member
Eninserv Limited	Committee member
<b>ESBN</b> Electrical Supply Board Networks	Committee member
EV Charging Ireland	Committee member
<b>EVCIA</b> Electric Vehicle Charger Installers Association of Ireland	Committee member
<b>HES</b> Harrington Electrical Services	Committee member
<b>HSE</b> Health Service Executive	Committee member
<b>IET</b> Institution of Engineering & Technology	Committee member
<b>NSAI</b> National Standards Authority of Ireland	Secretary
<b>SEAI</b> Sustainable Energy Authority of Ireland	Committee member
<b>TUD</b> Technical University Dublin	Committee member

<b>WA</b>	Western Automation	Committee member
	Safe Electric	Committee member
	John Claire Training Ltd	Committee member
<b>Liaison</b>	Liaison NSAI/ETC/TC 10	Committee member

## 4.2.3 Members NSAI/ETC/TC 02/WG Queries

Organisation	Role
<b>DCC</b> Dublin City Council	Committee member
<b>DSO</b> Distribution Network Operator	Committee member
Engineers Ireland	Chair
<b>ESBN</b> ESB Networks	Committee member
<b>HSE</b> Health Service Executive	Committee member
<b>NSAI</b> National Standards Authority of Ireland	Secretary
<b>TUD</b> Technical University Dublin	Committee member
John Clare Training	Committee member
Liaison NSAI/ETC/TC 10	Committee member

## 5 Summary of 2022 Activities

### 5.1 National

#### 5.1.1 Meetings NSAI/ETC/TC 02

In 2022, all meetings were held virtually. NSAI/ETC/TC 02 meetings were typically hosted in the mornings. Where issues would benefit from longer consideration, then these were often carried over to working group meetings held later in the day. Committee members attended the following National meetings as follows.

Meeting No.	Date	Minutes Reference
1	2022/01/20	<a href="#">N2346</a>
2	2022/02/17	<a href="#">N2365</a>
3	2022/03/24	<a href="#">N2400</a>
4	2022/04/21	<a href="#">N2418</a>
5	2022/06/16	<a href="#">N2451</a>
6	2022/07/21	<a href="#">N2474</a>
7	2022/09/15	<a href="#">N2516</a>
8	2022/10/20	<a href="#">N2542</a>
9	2022/11/17	<a href="#">N2567</a>

#### 5.1.2 Meetings NSAI/ETC/TC 02/WG 01

Meeting No.	Date	Minutes Reference
1	2022/01/20	<a href="#">N0104</a>
2	2022/02/17	<a href="#">N0107</a>
3	2022/03/24	<a href="#">64-2552-CD, 64-2553-CD</a>
4	2022/04/21	<a href="#">N0113</a>
5	2022/06/16	<a href="#">N0116</a>



6	2022/07/21	<a href="#">N0124</a>
7	2022/09/15	<a href="#">N0122</a>
8	2022/10/20	<a href="#">N0125</a>
9	2022/11/17	<a href="#">N0128</a>

### 5.1.3 Meetings NSAI/ETC/TC 02/WG 03

Meeting No.	Date	Minutes Reference
1	2022/01/11	<a href="#">N0159</a>
2	2022/02/08	<a href="#">N0164</a>
3	2022/02/22	<a href="#">N0171</a>
4	2022/03/08	<a href="#">N0176</a>
5	2022/04/26	<a href="#">N0188</a>
6	2022/06/14	<a href="#">N0196</a>
7	2022/09/13	<a href="#">N0200</a>
8	2022/11/08	<a href="#">N0204</a>

### 5.1.4 Meetings NSAI/ETC/TC 02/WG Queries

Meeting No.	Date
1	2022/01/17
2	2022/02/14
3	2022/03/21
4	2022/04/19
5	2022/06/13
6	2022/09/12
7	2022/09/26
8	2022/10/17
9	2022/11/14

### 5.1.5 National Work

The key focus for NSAI/ETC/TC 02 in 2022 was promoting the New National Rules for Electrical Installations I.S. 10101 and the evaluation of Part 722 of I.S. 10101 “Supply of electric vehicle”.

NSAI maintained a [FAQs](#) page for the launch of I.S. 10101. This page is maintained by NSAI.

NSAI/ETC/TC 02 meetings include agenda items for liaising with other NSAI committees, including receiving reports/presentations and providing technical replies to queries.

The regular works of considering public queries in relation to I.S. 10101 continued, as well as reviewing forthcoming proposals from CENELEC and IEC for which Ireland has a vote. A dedicated workgroup met regularly throughout the year to review the text of new HD document clause by clause to see the impact on I.S. 10101.

NSAI/ETC/TC 02 membership has remained strong throughout 2022, with attendances at an all-time high, and enquiries from non-members seeking to get involved.

## 5.2 International/Regional

### 5.2.1 Meetings

Committee Members attended international CENELEC (CLC) and IEC meetings as follows:

Meeting No.	Committee Name	Location	Date
1	IEC/TC64/MT 1	Virtual	2022/02/24
2	IEC/TC64/MT 9	Virtual	2022/03/01
3	IEC/TC64/MT 9	Virtual	2022/03/02
4	IEC/TC64/MT 9	Virtual	2022/03/03
5	IEC/TC64/MT 1	Virtual	2022/06/21
6	IEC/TC64/MT 1	Virtual	2022/06/22
7	IEC/TC64/MT 2	Virtual	2022/06/05
8	IEC/TC64/MT 2	Virtual	2022/06/06
9	IEC/TC64/MT 2	Virtual	2022/06/07
10	IEC/TC64/MT 1	Virtual	2022/09/23
11	IEC/TC64/MT 2	Virtual	2022/10/04
12	IEC/TC64/MT 2	Virtual	2022/10/05
13	IEC/TC64/MT 2	Virtual	2022/10/06
14	CLC/TC64/WG 2	Virtual	2022/12/19

Ireland is fortunate to have a seat at CENELEC & IEC and will need to work to hold its high standing in international circles. The meetings demonstrate how the speed and volume of electrical standardisation has grown, and how countries have evolved their organisations to respond to the rapidly changing electrical environment.

Members of NSAI/ETC/TC 02 also joined IET JPEL/64 meetings.

Meeting No.	Committee Name	Location	Date
1	IET - JPEL/64/A Verification	Virtual	2022/01/10
2	IET - JPEL/64/B Thermal Effects	Virtual	2022/01/12
3	IET - JPEL/64/A Verification	Virtual	2022/03/14
4	IET - JPEL/64/B Thermal Effects	Virtual	2022/03/15
5	IET - JPEL/64	Virtual	2022/04/13

### 5.2.2 International/Regional Work

Members of the committee attended maintenance teams and working group meetings.

### 5.2.3 International/Regional Standards Reviewed

All draft standards in the 60364-series issued by IEC TC64 and CLC TC64 to national mirror committees are received and considered by NSAI/ETC/TC 02. Consideration includes how the proposed new standards affect the current National Rules for Electrical Installations I.S. 10101:2020.

## 5.2.4 International/Regional Voting Results

NSAI/ETC/TC 02 monthly meetings propose a vote where required for IEC or CENELEC documents, which NSAI submits to the relevant bodies.

The committee have actively voted on 19 documents in 2022 and have submitted 13 sets of comments.

Body	Vote Reference	Comments Submitted	Decision
CLC	63262 64/2545/CDV	No	Approve
CLC	69728 HD 60364-5-52:2011/FprAB	No	Approve
IEC	64/2511/CD	Yes	Approve
IEC	64/2535/CDV	Yes	Approve
IEC	64/2539/CD	Yes	Approve
IEC	64/2542/CD	Yes	Approve
IEC	64/2543/CD	Yes	Approve
IEC	64/2544/DC	No	Abstain
IEC	64/2545/CDV	No	Approve
IEC	64/2549/DC	Yes	Approve
IEC	64/2551/CD	Yes	Approve
IEC	64/2552/CD	Yes	Approve
IEC	64/2553/CD	Yes	Approve
IEC	64/2554/Q	No	Approve
IEC	64/2555/NP	No	Abstain
IEC	64/2557/Q	Yes	Approve
IEC	64/2560/DC	Yes	Approve
IEC	64/2563/Q	Yes	Approve
IEC	64/2578/Q	Yes	Approve

## 5.3 Regulatory Development/Update

The work of NSAI/ETC/TC 02 is influenced by several European Directives including the Alternative Fuels Infrastructure Directive, the Construction Products Directive, the Low Voltage Directive, the Electromagnetic Compatibility Directive to name but a few. The National Rules for Electrical Installations must also align with Ireland's Building Regulations, which requires liaison with the Department of the Environment. Continued pressure to reduce carbon footprint has implications on the wiring rules where new standards are being developed for alternative energies, and NSAI/ETC/TC 02 members liaison with ESB and SEAI to align regulations.

## 6 Irish Publications/Reviews

### 6.1 Publications

No new publications were issued in 2022

## 6.2 Reviews

NSAI/ETC/TC 02/WG 01 are reviewing the additional HD’s which have been published since 2017 which impact I.S. 10101. This work will be ongoing.

The following ETCI documents were reviewed by the committee in 2020, 2021 & 2022. The following documents were withdrawn:

ET 101:2008/A3:2018	National Rules for Electrical Installations - Amendment No. 3	
ET 101:2008/AC:2018	National rules for electrical installations	
ET 101:2008+A1&A2	National rules for electrical installations	
ET 107	National rules for inspection and certification of existing electrical installations for reconnection to the distribution system	
ET 204	Code of practice for control systems involving programmable electronic products and systems	
ET 205	Guide to the installation of extra-low voltage lighting systems	Withdrawn 31/07/2022
ET 207 - 3rd ed	Guide to national rules for electrical installations	
ET 208	Code of practice for the design, selection and erection of LV switchboards for residential applications	
ET 210	Code of practise for the selection and installation of low voltage generators	
ET 211	Code of practise for public lighting installation in residential areas	
ET 212	Guidelines for extensions, additions and alterations to existing electrical installations	
ET 214	Guide to the selection and use of Residual Current Devices	
ET 206:2009	The Management of Electrical Safety at Work	Withdrawn 31/07/2022 & handed over to HSA
ET 206A:2000	Procedural guidelines for working on electrical installations	
ET 213	Guide to the Basic Principles of Electrical Safety	
ET 215	Guide to the maintenance, inspection and testing of portable equipment (Electrical appliances and tools) in the workplace	
ET 103:2015	National Rules for Electrical Installations Power installations exceeding 1 kV a.c. (1.5 kV d.c.)	Withdrawn 01/11/2019
ET 105:2011	National Rules for Electrical Installations in Potentially Explosive Atmospheres (3rd Edition)	Withdrawn 26/11/2018
ET 201	Code of practice for the design, selection and erection of low voltage switchboards for industrial/commercial applications	Withdrawn 29/05/2020
ET 202	Guide to the selection of electrical apparatus for use in potentially explosive atmospheres	Withdrawn 16/11/2011
ET 209	A recommended maintenance & inspection routine for electrical installations in potentially explosive atmospheres	Withdrawn 16/11/2011

NSAI have published a website with the ETCI document status [ETCI document status | NSAI](#).

## 7 Work programme for 2023 onwards

Amendment to I.S 10101:

The committee will be very busy in 2023 as they are working on an amendment to I.S. 10101. The amendment is to cover the Revision of Part 722 "Supply of electric vehicle" which specifies the requirements for circuits intended to supply energy to electric vehicles & circuits intended for feeding back electricity from electric vehicles into the supply network. The revision is required to bring Part 722 of I.S. 10101 in line with HD 60364-7-722:2018 and will include 4 additional rules as recommended by NSAI/ETC/TC 02/WG 03 "Electric Vehicles Charging Points" following a full risk assessment of Electric Vehicles charging point installations. The amendment will also include the incorporation of Annex 8A (informative) Energy Efficiency into the main body of I.S.10101. This main part will become Chapter 8 Energy Efficiency. Chapter 8 will then consist of two parts.

- Part 8-1: Functional aspects – Energy Efficiency, and
- Part 8-2: Prosumer's low-voltage electrical installations.

The DSO have requested that Part 8 and Part 8-1, and the new Part 8-2 be included in this amendment. Their expert opinion is that the requirements contained in Part 8-1 and Part 8-2 address many of the safety concerns which they have as micro generation grows in Ireland and the consumer may also become a prosumer. Given the amendment to Part 722 is required to address safety concerns and will be a straight replacement of Part 722, it was felt by NSAI/ETC/TC 02/WG 01 "Wiring Rules Revision Taskforce" that incorporating Annex 8A into the main body should be made at this stage.

The ongoing committee workload is covered by three working groups.

- NSAI/ETC/TC 02/WG 01 "wiring rules"
  - The focus of this group is to review HD's which have been published since the cut-off date chosen for I.S. 10101. They will work on the amendment to I.S 10101 and plan for the next edition of I.S. 10101.
- NSAI/ETC/TC 02/WG 03 "EV charging points"
  - This group has made a recommendation for an amendment to I.S. 10101. The group will work on any public comments received once the amendment is put out for public consultation. The WG plan to meet quarterly as work continues in IEC and CLC and new technologies evolve e.g. Vehicle to Grid (V2G).
- NSAI/ETC/TC 02/WG Queries
  - This group is charged with providing responses to queries received.

The main committee NSAI/ETC/TC 02 continue to review and input into proposed changes to the 60364 series of standards at both IEC 64 & CLC TC64 level.

The committee will continue to review queries from the public on I.S. 10101, and where possible provide guidance.

The committee will work with its assigned liaison officers to encourage greater collaboration between the Electrotechnical sector committees.

The committee would like to get more involved at IEC & CLC level and it is hoped that some members of the committee will join working groups or maintenance teams in 2023.

The committee have updated their business plan and plan to progress actions within the plan over 2023.

## 8 Additional Information

All meetings were held by MS teams in 2022 and in 2023 it is foreseen that meeting will continue remote.