ANNUAL REPORT 2024

NSAI TECHNICAL COMMITTEES (NSAI/ETC "ELECTROTECHNICAL COMMITTEE")

Contents

1 Chair Statement

As we enter 2025, and as the Electrotechnical Committee continues to go from strength to strength, I am pleased to present my report for 2024. The NSAI ETC has 16 highly active technical committees. I am pleased to note that the NSAI ETC has good participation at our meetings which are now mostly in hybrid format ensuring ease of cooperation from a wide range of industrial sectors.

Standardisation plays an ever-greater role in our increasingly electrified world. The use of electrical technology in renewable energy and energy demand reduction is key to achieving our carbon budgets. This affects many committees including, NSAI ETC TC 02, Electrical Installations Committee, responsibility for the National Rules for Electrical Installations.

CENELEC has a strategic agenda for 2021-2030 within the context of the twin digital and green transitions, to ensure that our standardisation systems and services drive a transformative growth trajectory that Europe has embarked upon. CENELEC is optimizing the way they create value for customers and stakeholders in a rapidly changing world. EU and EFTA recognize and use the strategic value of the European standardization system.

The role of standardisation continues to be challenged by the European legislative process with a demand for more readily available access to standards. The European Court of Justice has ruled that there is an overriding public interest in the disclosure of harmonized standards. The good news is that these legal determinations have reinforced the central legal standing of standards which makes our work as experts ever more important and ensures that industry can influence the technical content.

European standardisation is driven by new technologies including electric transport, charging systems and environmental sustainability. An important new area that has provided standards to support EU legislation is in cyber security to protect consumers and our children. Future challenges also include the risks and advantages of artificial intelligence. Consideration is being given to how it can be deployed in safety critical applications.

The IEC General Meeting was held in Edinburgh with three themes encompassing an all-electric society, sustainability and ensuring sustainable global trade in electrotechnology. The IEC GM was attended by over 1500 experts from around 170 countries. The meeting recognised the importance of delivering an all-electric and connected society for all societies worldwide which also strengthens the role of IEC Standards.

For the electrotechnical sector, 2025 promises to be a year of progress, collaboration, and growth. The commitment of our experts giving their time to the standardisation and supporting the European and IEC policy priorities continues with excellent participation from Irish industry. I am confident that, thanks to the work of our many experts, we will succeed in making the world greener, more digital, and more competitive.

John McAuley

Chair of NSAI/ETC Committee

2 Introduction

NSAI has established the consultative Electro Technical Committee (ETC) to advise NSAI on technical and policy matters concerning Ireland's membership of the International Electrotechnical Commission (IEC) and European Committee for Electrotechnical Standardization (CENELEC), the formulation of Irish Standards and the establishment and maintenance of the

infrastructure of NSAI national mirror Technical Committee. The membership of the ETC is composed of key stakeholders/collective bodies that provide an authoritative and representative voice or policy role in the electrical sector.

The industry currently has 546 committees with experts involved in international work.

3 Scope of TC

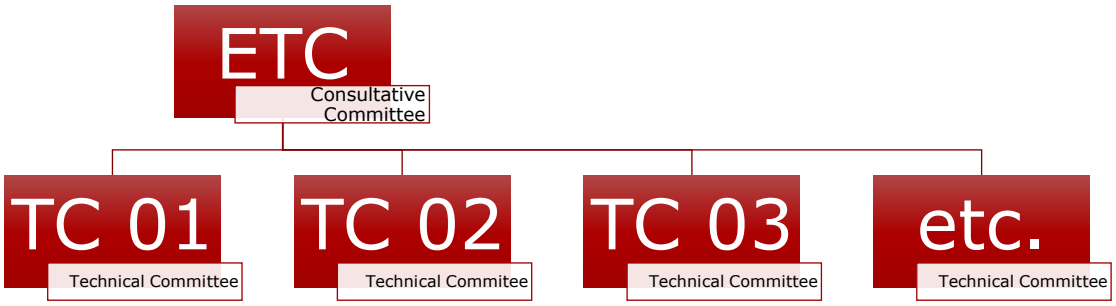
The NSAI ETC extends to all areas of electro-technology covered by the IEC and CENELEC, and to the extent from time to time agreed with NSAI, certain areas of the work of the European Telecommunications Standards Institute (ETSI), the International Organization for Standardization (ISO) and the European Committee for Standardization (CEN) or other relevant standards organisations.
The committee does not mirror international committees; Its function is to provide oversight to the following technical committees:

Committee Name	Committee Title
NSAI/ETC/TC 01	Safety of household and similar electrical appliances
NSAI/ETC/TC 02	Electrical Installations
NSAI/ETC/TC 03	Power installations exceeding 1kV (1.5kV dc)
NSAI/ETC/TC 04	Switchgear, control gear and associated equipment
NSAI/ETC/TC 06	Equipment for potentially explosive atmospheres
NSAI/ETC/TC 10	Electrical equipment in medical practice
NSAI/ETC/TC 11	Safety of Electronic Equipment within the field of Audio/Video, Information Technology and Communication Technology
NSAI/ETC/TC 12	Electronic Communications Systems
NSAI/ETC/TC 13	Alarm systems
NSAI/ETC/TC 14	Electric cables
NSAI/ETC/TC 15	Human exposure to electromagnetic fields
NSAI/ETC/TC 16	Electromagnetic Compatibility
NSAI/ETC/TC 18	Marine energy - Wave, tidal and other water current converters
NSAI/ETC/TC 20	Smart Grids, Renewables, Electric Vehicles and Energy Efficiency
NSAI/ETC/TC 21	Electrostatics
NSAI/ETC/TC 22	Environmental Standardization for Electrical and Electronic Products and Systems
NSAI/ETC/RCDTF	Residual Current Devices Task Force

4 Structure and Membership

4.1 Structure

The Figure below illustrates the structure of the Committee:



4.2 Members

The table below lists the members represented on the committee for the year:

National **CHAIR**	CEI	Compliance Engineering Ireland Ltd.
National **PRESIDENT**	NSAI	National Standards Authority of Ireland
National **SECRETARY**	NSAI	National Standards Authority of Ireland
ASSISTANT SECRETARY	NSAI	National Standards Authority of Ireland
National committee member	ACEI	Association of Consulting Engineers of Ireland
	AECI	Association of Electrical Contractors Ireland
	AEW	Association of Electrical Wholesalers
	CCPC	Competition and Consumer Protection Commission
	CIBSE	Chartered Institution of Building Services Engineers
	Comreg	Commission for Communications Regulation
	CRU	Commission for Regulation of Utilities
	DCC	Dublin City Council
	DUT	Technological University Dublin
	ECA	Electrical contractors Association in Ireland
	EIFI	Electrical Industries Federation of Ireland
		Eir
		Eirgrid
	EMDA	Electrical manufactures and Distributors Association
	ESB	Electricity Supply Board
	HSA	Health & Safety Authority
	IET	Institution of Engineering & Technology
		Independent Consultant
	NSAI	National Standards Authority of Ireland
	OPW	Office of Public Works
		Safe Electric
	SOLAS	Future Education and Training
National committee Observer		Chair NSAI/ETC/RCDTF
		Chair NSAI/ETC/TC 01
		Chair NSAI/ETC/TC 02
		Chair NSAI/ETC/TC 03
		Chair NSAI/ETC/TC 04
		Chair NSAI/ETC/TC 06

Chair NSAI/ETC/TC 10
Chair NSAI/ETC/TC 11
Chair NSAI/ETC/TC 12
Chair NSAI/ETC/TC 13
Chair NSAI/ETC/TC 15
Chair NSAI/ETC/TC 18
Chair NSAI/ETC/TC 20
Chair NSAI/ETC/TC 21
Chair NSAI/ETC/TC 22

5 Summary of 2024 Activities

5.1 National

5.1.1 Meetings

Committee Members attended the following National meetings in NSAI as follows:

Meeting No.	Date	Minutes Reference
1	2024-02-08	N236
2	2024-05-09	N246
3	2024-09-26	N272

NSAI/ETC/WG 01 "HV & LV earthing Systems" did not hold any meetings in 2024.

5.1.2 National Work

Highlights and decisions for 2024 included:

- NSAI/ETC, John McAuley was re-appointed as the Chair of NSAI/ETC Committee on the 6th of May 2024 for a 3-year term.
- Three national Hybrid meetings in NSAI offices and using MS Teams, meaning a total of Twenty-four meetings have now taken place since the formation of the NSAI Electrotechnical Committee on the 20th March 2017.
- The committee welcomed a Safe Electric representative onto the committee.
- NSAI published its first standard using OSD (Online Standards Development). I.S. 10101:2020+A1:2024 has been published as a fully incorporated standard using the online standards authoring tool.
- I.S. 10101:2020+A1:2024, National Rules for Electrical Installations was published in September 2024.
- The IEC General meeting took place in Edinburgh with good Irish representation at the meeting.
- NSAI continues to participate in the CENELEC BT and various working groups under the CENELEC BT.
- NSAI continues to participate in the high-level forum (HLF) which was established in Europe to work on the Annual Union Work Programme.
- The Standards Forum took place in Dublin on the 16th of October, with the theme of "Standards and the Digital World". This was a very successful event and an opportunity for NSAI to thank all our experts for their participation in Standardization.

5.2 International/Regional

5.2.1 Meetings

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

Committee Name	Location	Date	No. of Attendees
176th CENELEC BT	Brussels	14th -15th February 2024	2
177th CENELEC BT	Istanbul	28th – 30th May 2024	2 (Virtual)
178th CENELEC BT	Brussels	15th – 16th October 2024	1
88th IEC General meeting	Edinburgh	21st – 25th October 2024	6 (in person) 3 (virtual)

5.2.2 International/Regional Work

Highlights for 2024 included:

- NSAI/ETC/TC 01 continue to contribute to the work of IEC TC 61 & CLC TC 61, and also IEC TC 59 & CLC TC 59.

- NSAI/ETC/TC 02 published the first amendment to the National Rules for Electrical Installations, I.S. 10101:2020+A1:2024. Paul Dunne was re-appointed as the Chair of NSAI/ETC/TC 02 Committee on the 18th of January 2024 for a 3-year term. Ray Eustace was re-appointed as the Chair of NSAI/ETC/TC 02/WG 03 Committee on the 3rd December 2024 for a 3-year term. The NSAI/ETC/TC 02 Queries group continue to address questions raised by the industry in relation to the National Rules for Electrical installations, answering 41 queries in 2024. Members of the committee travelled to participate in both IEC & CLC meetings. This increased engagement has led to Irish requirements being included in the standards currently under development. NSAI attended the AECI 2024 Electrical Trade show in Lucan on the 24th of May 2024.

- NSAI/ETC/TC 03 members have travelled to participate in IEC & CLC meetings. The committee welcomed 3 new members and said goodbye to 1 member who retired. Members attended the IEC/TC 99 Plenary meeting in person and members attended the CLC/TC99x plenary both in person and remote. Two members of the committee continue in their role a convenor of IEC/PC/128/WG 1 and IEC/PC/127 with other members participating on these WGs. NSAI attended the Substation Safety Conference & Expo in Portlaoise to promote I.S. EN 50110-1 Operation of Electrical Installations - Part 1: General, & I.S. EN 61936-1 Power Installations exceeding 1KV (AC) - Part 1: Common Rules, following these standards being referenced in a Practice Note: Competence of Persons Controlling, Operating, and Working on High-Voltage Apparatus.

- NSAI/ETC/TC 04 the Chair has been very active in recruiting new members to the committee and the committee welcomed 3 new members in 2024. Several members of the committee are active at both IEC and CLC level.

- NSAI/ETC/TC 06 Michael O'Brien was re-appointed as the Chair of NSAI/ETC/TC 06 Committee on the 6th of May 2024 for a 3-year term. The committee had a presentation on the NSAI Hydrogen work status in September along with a presentation from DEHN on Lightening Protection. In November they had a presentation from Newson Gale on Statics. The WG within this committee continue to try to produce guidance which is

hosted on the HSA website. The Subcommittee NSAI/ETC/TC 06/SC 01 are very active in CEN/TC 305. Damien Hennessy was re-appointed as the Chair of NSAI/ETC/TC 06/SC 01 Committee on the 10th of April 2024 for a 3-year term.

- NSAI/ETC/TC continue to contribute to the work of IEC TC 62 and CLC TC 62. In 2024 members of NSAI/ETC/TC 10 increased their participation in several important projects, with members participating on groups working on the next edition of IEC 60601-1, and also new standards on AI and Software. Ireland hosted meetings in 2024 for IEC/SC 62A/WG 47 and WG 48, and IEC/TC 62/PT 63450.

- NSAI/ETC/TC 11 continue to contribute to the work of IEC TC 108 & CLC TC 108X. Following the publication of the 4th edition of IEC 62368-1 in 2023, the European version was published in 2024 by CLC/TC 108X, the Chairperson of which is also the Chair of NSAI/ETC/TC 11.

- NSAI/ETC/TC 12 continues to participate in IEC TC 46, IEC TC 86, with a primary focus on IEC TC 100 and CLC/TC 100X. Two highly engaging and successful meetings took place in 2024.

- NSAI/ETC/TC 13 Andrew Kelly was appointed as the Chair of NSAI/ETC/TC 13 Committee on the 23rd of October for a 3-year term. The committee continues to participate in CENELEC TC 79 and is particularly active in the review of EN 50131-1 "Alarm systems - Intrusion and hold-up systems - Part 1: System requirements" which is fundamental to CLC/TC 79. The committee also follows the work of IEC TC 79.

- NSAI/ETC/TC 14 – The committee initiated a revision to I.S. 201-4:2013, Part 4: PVC and low smoke halogen free sheathed cables for fixed wiring.

- NSAI/ETC/TC 15 continues to monitor and contribute to the work programmes of IEC/TC 106, CLC/TC 106X and their working groups, including holding the convenorship of CLC/TC 106X/WG 2. Members attended meetings of IEC/TC 106 and CLC/TC 106X throughout 2024. Committee Chairperson Paul Reilly was re-appointed as the Chair of NSAI/ETC/TC 15 Committee on the 12th June 2024 for a 3-year term.

- NSAI/ETC/TC 16 John McAuley was re-appointed as the Chair of NSAI/ETC/TC 16 Committee on the 6th December 2024 for a 3-year term. The committee are active and continue to participate in CELELEC and IEC work. NSAI hosted the 68th plenary meeting of CLC TC 210 in Dublin on the 14th & 15th of May 2024. The Chair attended the 69th Plenary meeting in Stockholm on the 10th & 11th of December 2024. Member of the committee attended plenary meetings for CLC TC 8x and CLC TC 47x along with IEC TC 47, CISPR and IEC TC 62 plenary meetings.

- NSAI/ETC/TC 18 NSAI experts continue to play a leading role in the work of IEC/TC 114 highlighted by Mr. James F. Kelly receiving the IEC 1906 Award for his exceptional individual achievements in 2024.

- NSAI/ETC/TC 20 Following efforts in 2024 to descope areas with no engagement, it remains the committee with the largest number of international counterparts within the ETC sector. This reflects the extensive scope of its work and stands as a testament to the dedication and hard work of its members.

- NSAI/ETC/TC 21 Lewis Brien was re-appointed as the Chair of NSAI/ETC/TC 21 Committee on the 5th November 2024 for a 3-year term. The committee held 4 meetings in 2024 and the Chair attended virtually the IEC TC 101, Electrostatics Plenary meeting.

- NSAI/ETC/TC 22 James Stapleton was appointed as the Secretary of this committee. The committee continues with high levels of engagement with IEC/TC 111 & CLC/TC 111X. The committee continued to review draft standards and had a presentation on developments in the Circular Economy sector, an area in which four standards were published in 2024.

- NSAI/ETC/RCDTF the members of this group are small, but they are actively involved in IEC/TC 23E & CLC/TC 23E.

- NSAI continue to be represented at the CENELEC Technical Board (BT). AJG was nominated by NSAI as the CENELEC BT Permanent Delegate.

- The IEC Young Professionals Programme took place this year from Edinburgh. NSAI sent one representative from Ireland.

- NSAI continue as members of the IEC Forum Organising committee.

- NSAI attended the IEC Forum during the General meeting, along with several governance meetings.

- NSAI had 4 technical experts attend technical meetings held during the IEC General meeting. 3 NSAI staff attended governance meetings. The NSAI President along with the Chair attended the following BSI events which ran in parallel to the IEC General meeting:
    - AI Technology & Standard Summit,
    - Quantum Technology Symposium,
    - Enabling a Net Zero Future.

  NSAI had 1 young professional present for the IEC Young Professionals Programme.

5.2.3 IEC P & O Membership Status

In 2024 NSAI Membership status was changed from a Participating to Observer Member on the following 2 technical committees.

Committee	Description
TC 59/SC 59D	Performance of household and similar electrical laundry appliances
TC 61/SC 61C	Safety of refrigeration appliances for household and commercial use

In 2024 NSAI Membership status was changed from an Observer Member to a Participating Member on the following 1 technical committee.

Committee	Description
TC 59/SC 59N	Electrical air cleaners for household and similar purposes

In 2024 NSAI started participating or observing the following 3 technical committees

Committee	Description
TC 47/SC 47D	Semiconductor devices packaging
SyC BDC	IEC/ISO Joint Systems Committee on Bio-digital Convergence (IEC/ISO JSyC BDC)
SyC Smart Cities	Electrotechnical aspects of Smart Cities

NSAI are currently a P "Participating" member to 60 IEC Technical committees and an O "Observer" member in 64 IEC Technical Committees. Total 124.

Committee	Description	Status
TC 1	Terminology	P-Member
TC 2	Rotating machinery	P-Member
TC 4	Hydraulic turbines	O-Member
TC 5	Steam turbines	O-Member
TC 7	Overhead electrical conductors	O-Member
TC 8	System aspects of electrical energy supply	P-Member
TC 8/SC 8A	Grid Integration of Renewable Energy Generation	P-Member
TC 8/SC 8B	Decentralized electrical energy systems	P-Member
TC 10	Fluids for electrotechnical applications	O-Member
TC 11	Overhead lines	O-Member
TC 15	Solid electrical insulating materials	O-Member
TC 17	High-voltage switchgear and controlgear	O-Member
TC 17/SC 17A	Switching devices	O-Member
TC 17/SC 17C	Assemblies	O-Member
TC 20	Electric cables	O-Member
TC 22	Power electronic systems and equipment	O-Member
TC 22/SC 22G	Adjustable speed electric power drive systems (PDS)	P-Member
TC 23	Electrical accessories	O-Member
TC 23/SC 23B	Plugs, socket-outlets and switches	O-Member
TC 23/SC 23E	Circuit-breakers and similar equipment for household use	P-Member
TC 23/SC 23G	Appliance couplers	O-Member
TC 23/SC 23H	Plugs, Socket-outlets and Couplers for industrial and similar applications, and for Electric Vehicles	O-Member
TC 23/SC 23J	Switches for appliances	O-Member
TC 27	Industrial electroheating and electromagnetic processing	O-Member
TC 31	Equipment for explosive atmospheres	P-Member
TC 31/SC 31G	Intrinsically-safe apparatus	P-Member
TC 31/SC 31J	Classification of hazardous areas and installation requirements	P-Member
TC 31/SC 31M	Non-electrical equipment and protective systems for explosive atmospheres	P-Member
TC 33	Power capacitors and their applications	O-Member
TC 36	Insulators	P-Member
TC 36/SC 36A	Insulated bushings	O-Member
TC 37	Surge arresters	P-Member

TC 37/SC 37A	Low-voltage surge protective devices	O-Member
TC 37/SC 37B	Components for low-voltage surge protection	O-Member
TC 40	Capacitors and resistors for electronic equipment	O-Member
TC 42	High-voltage and high-current test techniques	O-Member
TC 44	Safety of machinery - Electrotechnical aspects	P-Member
TC 45/SC 45B	Radiation protection instrumentation	O-Member
TC 46	Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories	O-Member
TC 46/SC 46A	Coaxial cables	O-Member
TC 46/SC 46C	Wires and symmetric cables	O-Member
TC 46/SC 46F	RF and microwave passive components	O-Member
TC 47	Semiconductor devices	P-Member
TC 47/SC 47A	Integrated circuits	P-Member
TC 47/SC 47D	Semiconductor devices packaging	P-Member
TC 47/SC 47E	Discrete semiconductor devices	P-Member
TC 48/SC 48B	Electrical connectors	O-Member
TC 51	Magnetic components, ferrite and magnetic powder materials	O-Member
TC 56	Dependability	P-Member
TC 57	Power systems management and associated information exchange	P-Member
TC 59	Performance of household and similar electrical appliances	P-Member
TC 59/SC 59C	Electrical heating appliances for household and similar purposes	P-Member
TC 59/SC 59D	Performance of household and similar electrical laundry appliances	P-Member
TC 59/SC 59F	Surface cleaning appliances	O-Member
TC 59/SC 59L	Small household appliances	O-Member
TC 59/SC 59M	Performance of electrical household and similar cooling and freezing appliances	O-Member
TC 59/SC 59N	Electrical air cleaners for household and similar purposes	O-Member
TC 61	Safety of household and similar electrical appliances	P-Member
TC 61/SC 61B	Safety of stationary cooking appliances for household use, and microwave appliances for household and commercial use	O-Member
TC 61/SC 61C	Safety of refrigeration appliances for household and commercial use	P-Member
TC 61/SC 61D	Appliances for air-conditioning for household and similar purposes	O-Member
TC 61/SC 61H	Safety of electrically-operated farm appliances	O-Member
TC 61/SC 61J	Safety of electrical motor-operated cleaning appliances for commercial use	O-Member
TC 62	Medical equipment, software, and systems	P-Member
TC 62/SC 62A	Common aspects of medical equipment, software, and systems	P-Member
TC 62/SC 62B	Medical imaging equipment, software, and systems	O-Member

TC 62/SC 62C	Equipment for radiotherapy, nuclear medicine and radiation dosimetry	O-Member
TC 62/SC 62D	Particular medical equipment, software, and systems	P-Member
TC 64	Electrical installations and protection against electric shock	P-Member
TC 65	Industrial-process measurement, control and automation	P-Member
TC 65/SC 65A	System aspects	P-Member
TC 65/SC 65B	Measurement and control devices	O-Member
TC 65/SC 65C	Industrial networks	O-Member
TC 66	Safety of measuring, control and laboratory equipment	P-Member
TC 68	Magnetic alloys and steels	O-Member
TC 69	Electrical power/energy transfer systems for electrically propelled road vehicles and industrial trucks	P-Member
TC 70	Degrees of protection provided by enclosures	O-Member
TC 76	Optical radiation safety and laser equipment	O-Member
TC 77	Electromagnetic compatibility	P-Member
TC 77/SC 77A	EMC - Low frequency phenomena	P-Member
TC 77/SC 77B	High frequency phenomena	P-Member
TC 77/SC 77C	High power transient phenomena	O-Member
TC 78	Live working	P-Member
TC 79	Alarm and electronic security systems	P-Member
TC 80	Maritime navigation and radiocommunication equipment and systems	O-Member
TC 81	Lightning protection	P-Member
TC 86	Fibre optics	O-Member
TC 86/SC 86A	Fibres and cables	O-Member
TC 86/SC 86B	Fibre optic interconnecting devices and passive components	O-Member
TC 86/SC 86C	Fibre optic systems, sensing and active devices	O-Member
TC 88	Wind energy generation systems	P-Member
TC 94	Electrical relays	O-Member
TC 95	Measuring relays and protection equipment	P-Member
TC 99	Insulation co-ordination and system engineering of high voltage electrical power installations above 1,0 kV AC and 1,5 kV DC	P-Member
TC 100	Audio, video and multimedia systems and equipment	P-Member
TC 101	Electrostatics	P-Member
TC 106	Methods for the assessment of electric, magnetic and electromagnetic fields associated with human exposure	P-Member
TC 108	Safety of electronic equipment within the field of audio/video, information technology and communication technology	P-Member
TC 110	Electronic displays	O-Member
TC 111	Environmental standardization for electrical and electronic products and systems	P-Member

TC 114	Marine energy - Wave, tidal and other water current converters	P-Member
TC 115	High Voltage Direct Current (HVDC) transmission for DC voltages above 100 kV	P-Member
TC 116	Safety of motor-operated electric tools	O-Member
TC 120	Electrical Energy Storage (EES) systems	P-Member
TC 121	Switchgear and controlgear and their assemblies for low voltage	P-Member
TC 121/SC 121A	Low-voltage switchgear and controlgear	P-Member
TC 121/SC 121B	Low-voltage switchgear and controlgear assemblies	P-Member
TC 122	UHV AC transmission systems	O-Member
TC 124	Wearable electronic devices and technologies	O-Member
PC 127	Low-voltage auxiliary power systems for electric power stations and substations	P-Member
PC 128	Operation of electrical installations	P-Member
CISPR	International special committee on radio interference	P-Member
CISPR/CIS/A	Radio-interference measurements and statistical methods	O-Member
CISPR/CIS/B	Interference relating to industrial, scientific and medical radio-frequency apparatus, to other (heavy) industrial equipment, to overhead power lines, to high voltage equipment and to electric traction	O-Member
CISPR/CIS/D	Electromagnetic disturbances related to electric/electronic equipment on vehicles and internal combustion engine powered devices	O-Member
CISPR/CIS/F	Interference relating to household appliances, tools, lighting equipment and similar apparatus	O-Member
CISPR/CIS/H	Limits for the protection of radio services	O-Member
CISPR/CIS/I	Electromagnetic compatibility of information technology equipment, multimedia equipment and receivers	P-Member
SyC BDC	IEC/ISO Joint Systems Committee on Bio-digital Convergence (IEC/ISO JSyC BDC)	O-Member
SyC SET	Sustainable Electrified Transportation	P-Member
SyC Smart Cities	Electrotechnical aspects of Smart Cities	O-Member
SyC Smart Energy	Smart Energy	O-Member
ISO/IEC JTC 1/SC 25	Interconnection of information technology equipment	P-Member
ISO/IEC JTC 1/SC 41	Internet of Things and Digital Twin	P-Member

5.2.4 International/Regional Standards Reviewed

International/Regional standards reviewed are provide in respective technical committee (TC) reports.

IEC Systems Committee for Sustainable Electric Transport (SyC SET)

NSAI have an expert sitting on the IEC Systems committee for SET. This experts' reports are presented to the NSAI ETC Committee.

In 2024, our expert attended the following SyC SET meetings:

- 27th – 30th of May 2024 China (attended remotely)
- 2nd December 2024 China (attended remotely).

5.2.5 International/Regional Voting Results

Each of the Technical committees listed in the Electrotechnical Sector have actively voted as listed in their annual reports on relevant IEC and CENELEC documents open for vote. In addition to these votes NSAI have voted on all CEN/BT & CENELEC/BT documents open for vote.

5.3 Regulatory Development/Update

Regulatory developments associated with each ETC TC are provided in respective TC reports.

6 Irish Publications/Reviews

6.1 Publications

NSAI adopted the following standards in the electrotechnical area:
Power BI

- 308 as I.S. EN IEC
- 75 as I.S. EN
- 9 as I.S. EN ISO/IEC
- 0 as I.S. EN IEC/IEEE
- 1 as I.S. HD
- 5 as NSAI/HD
- 5 as NSAI/CWA
- 4 as NSAI/CLC/TS
- 5 as NSAI/CLC IEC/TS
- 1 as NSAI/CLC IEC/TR
- 3 as NSAI/CEN/CLC ISO/IEC/TS
- 2 as NSAI/CEN/CLC/TR

NSAI published the following standards in the electrotechnical area:

I.S. 10101:2020+A1:2024	National Rules for Electrical Installations
I.S. 3218:2024	Fire detection and alarm systems – system planning, design, installation, commissioning, servicing and maintenance.
I.S. 844:2024	Transportation and Installation of Bituminous Mixtures for Roads, Airfields, and Other Trafficked Areas

6.2 Reviews

All review work carried out by NSAI/ETC Committees has been documented in the relevant Annual report within the electrotechnical sector. Each subcommittee reports on the review work which they have carried out to the main ETC committee during the meetings conducted throughout the year.

7 Work programme for 2025 onwards

For 2025, NSAI ETC will continue its work in support of the Technical Committees, approve the circulation and publication of new NSAI publications, and provide direction to the Permanent Delegate to the CLC Technical Board. Members will advise NSAI concerning new Work Areas in electrotechnical standardisation and provide input to the HLF activities.

8 Additional Information

No additional information.