ANNUAL REPORT 2023

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

Contents

1 Chairman's Statement

I am pleased to provide my report for 2023. It gives us an opportunity to look back at 2023 and to look forward to the challenges that lie ahead.

This year marks the 30th anniversary of the Single Market which led to an enhanced Union. 1993 saw the end of internal border controls between EU countries which is one of the brightest successes in the history of the European Union. This was based on the EU's fundamental freedoms: free movement of people, goods, services and capital. The advent of the Single Market required the harmonisation of standards across the EU. One of the successes of the single market was CE marking which ensured that a manufacturer of a product could have free access to a market of several hundreds of million people. Innovative Irish companies have been very successful in taking advantage of the opportunities offered by this Single Market, assisted by the work of experts on the relevant standards bodies.

Standards have been instrumental: by providing trustworthy and market-based solutions, ensuring safety and facilitating trade across borders, standards have contributed to making the Single Market a reality. The Irish standards committees have made significant contributions to the development of European harmonised standards to support the EU Directives over the last thirty years. There has been a strong representation from Irish indigenous and multinational manufacturers with cooperation from state agencies such as ESB and the regulators.

CENELEC is deeply engaged in the implementation of their Strategy 2030, which is closely aligned with the European standardization Strategy. They are pursuing the required transformation of the standardisation system to deliver on their strategic goals and enable the twin green and digital transitions for the resilience of the European economy. CENELEC is committed to helping Europe in its ambitious path powering the fight against global warming, creating a thriving digital ecosystem, fostering a sustained and fair economic recovery and the quest for strategic autonomy.

NSAI Electrotechnical Committee (ETC) has evolved to having meetings in hybrid format during 2023. This enables good participation from all members especially those located remotely. The ETC committees were very active and continue to grow with experts from many Irish companies giving their time and technical expertise to the ETC technical committees to make new technologies possible.

The many standards areas that ETC are involved in are essential to support EU Directives. The European Commission and CENELEC continue to improve the adoption of standards and the process of approval which is very important for areas under the ETC remit such as Medical Devices, EMC, the Low Voltage Directive and ATEX.

The IEC General meeting scheduled for Egypt in October 2023 had to be scaled down to a virtual event because of circumstances in the region. The president outlined the themes of the IEC for the years ahead. These were digital and all-electric society, a sustainable world and leading on trust, inclusion and collaboration.

The digital and all-electric society is about leveraging intelligent and green electrical energy together with digital technologies to support the decarbonization of our environment. Ireland is a leading country in decarbonization and is assisting to expand an already rich portfolio of standards. These standards are being integrated into the new digital society which offers more value to our community and to the users of our products and services.

The second theme of the IEC Strategic Plan is fostering a sustainable world. The NSAI ETC is active in developing a committee to look at hydrogen technologies. Hydrogen use will also be an important enabling technology to maximise the use of our electricity resources. The work of the ETC committees will enable the continued transition to renewable energy and a clean future.

The third theme is leading on trust, inclusion and collaboration. This is extremely important, particularly in Europe where we rely on harmonised standards to demonstrate compliance with the essential requirements of EU Directives. In the ETC, we cooperate with a wide range of stakeholders including regulators and policy makers.

An important aspect of ETC activity will be cybersecurity. Cybersecurity has been identified as one of the standardization priorities, since cyber-threats impact a multitude of sectors affecting NSAI ETC expert companies. CENELEC has developed three draft standards to support to EU regulations including the radio equipment Directive which has added a delegated act on cybersecurity. Originally scheduled for enforcement in August 2024, this regulation has been postponed to 2025 due to ongoing preparation of harmonised standards. Consequently, all wireless devices and products sold in the EU will be required to comply with the RED delegated act from August 1, 2025.

The National rules for Electrical Installations, I.S. 10101:2020 continue to see extensive uptake. There were 15,000 copies of the wiring rules sold since it was published in 2020. 2023 was a busy year for this committee as it introduced a significant draft amendment to I.S. 10101. The draft amendment is out for public consultation from the 27th of November 2023 until the 27th of February 2024.

The NSAI ETC Committees continue to play a key role in the development of National and International standards, and I look forward to working with you throughout 2024.

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 465 committees with experts involved in international work.

3 Scope of TC

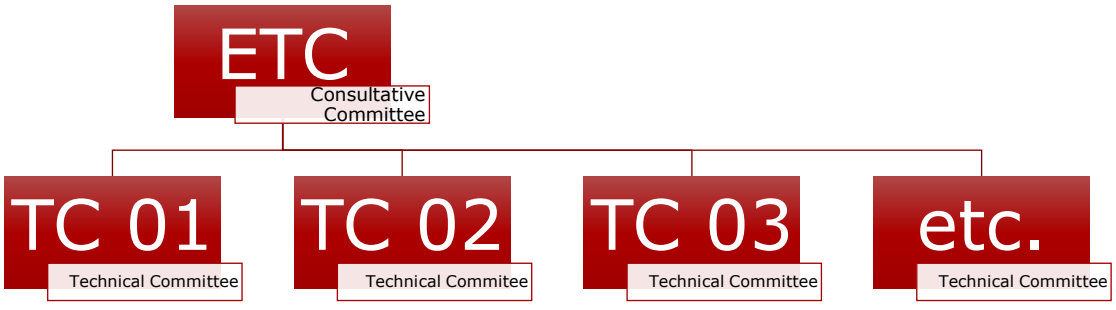
The NSAI ETC extends to all areas of electro-technology covered by the IEC and CENELEC, and to the extent from time to time agreed with NSAI, certain areas of the work of the European Telecommunications Standards Institute (ETSI), the International Organization for Standardization (ISO) and the European 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 provides 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
	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 2023 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	2nd February 2023	N0185
2	4th of May 2023	N0198
3	28th of October 2023	N0220

NSAI/ETC/WG 01 "HV & LV earthing Systems" attended the following meetings:

Meeting No.	Date	Minutes Reference
1	10th of January 2023	N0027
2	7th of February 2023	N0032
3	14th of March 2023	N0035
4	4th of July 2023	N0043
5	12th of September 2023	N0050
6	10th of October 2023	N0053

5.1.2 National Work

Highlights and decisions for 2023 included:

- Three national Hybrid meetings in NSAI offices and using MS Teams, meaning a total of Twenty-one meetings have now taken place since the formation of the NSAI Electrotechnical Committee on the 20th March 2017.
- Work continues in the Working group set up in 2022, NSAI/ETC/WG 01 "Adjacent HV & LV earthing systems" with six meeting taking place in 2023.
- The committee acknowledged that the Safe Electric scheme changed providers from RECI to SGS ltd, trading as Safe Energy Ireland.
- The EISP fund has enabled 22 experts to apply for funding to attend international meetings.
- NSAI started to use OSD (Online Standards Development) and piloted this software for the draft amendment for I.S. 10101.
- The Draft Amendment for I.S. 10101, National Rules for Electrical Installations went out for public consultation on the 27th of November 2023 for 3 months.
- The IEC General meeting scheduled for Cairo, Egypt got changed to a fully virtual meeting. This transition with a week to go was very smooth and all involved thank IEC for their huge effort in making this meeting fully virtual.
- A high-level forum (HLF) was established in Europe to work on the Annual Union Work Programme, and NSAI are actively participating.
- CEN CENELEC launched a new Meeting Registration System.
- The Standards Forum took place in Dublin on the 11th of October, with the theme of "Circular Economy – Shaping standards and shaping our future". 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
173rd CENELEC BT	Brussels	23rd of February	1
174th CENELEC BT	Finland	24th – 25th May	1
175th CENELEC BT	Brussels	17th & 18th October	1
87th IEC General meeting	Cairo, virtually	19th October – 2 November	6

5.2.2 International/Regional Work

Highlights for 2023 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 developed the draft amendment to I.S. 10101 and put it out for 3 months public consultation on the 27th of November. 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/ETC/TC 03 members have travelled to participate in IEC & CLC meetings. The Chair attended the IEC/TC 99 Plenary meeting virtually 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. The committee ran a promotion campaign for 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, published by Engineers Ireland in May of this year.
- NSAI/ETC/TC 04 the committee selected a new chair at the start of 2023 which has led to the group getting a new lease of life. The committee have had presentations on IEC 61439-1, Low-Voltage switchgear and controlgear assemblies – Part 1 General Rules, IEC TR 63482 ED1, Maintenance of low voltage switchgear and controlgear and their assemblies during their meetings and IEC 61439-3, Low-voltage switchgear and controlgear assemblies – Part 3: Distribution boards intended to be operated by ordinary persons (DBO).
- NSAI/ETC/TC 06 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.
- NSAI/ETC/TC 10 continue to contribute to the work of IEC TC 62 and CLC TC 62. 2023 saw an increase in expert members from a number of areas, including clinical engineering, medical device manufacturers, and test houses. 2023 also saw increase focus in emerging technologies such as A.I. Members closely followed the ongoing initial work to revise IEC 60601-1, with work on the next edition to begin in earnest in 2024.NSAI/ETC/TC 11 supported the CDV of the 4th edition of IEC 62368-1. Committee chair, Peter Kelleher, has the role of chairperson of CENELEC TC 108X and they are currently working on the 4th edition of EN 62368.
- NSAI/ETC/TC 11 welcomed the publication of the 4th edition of IEC 62368-1 in 2023. The European version is being worked on currently by CLC/TC 108X, the Chairperson of which

is also the Chair of NSAI/ETC/TC 11. NSAI/ETC/TC 11 welcomed the publication of the 4th edition of IEC 62368-1 in 2023. The European version is being worked on currently 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, & IEC TC 100, and in 2023 increased its focus on the work of CLC/TC 100X. The committee continued its drive for new expert participants in 2023.
- NSAI/ETC/TC 13 continues to participate in CENELEC TC 79 and is also following the work of IEC TC 79.
- 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 2023.
- NSAI/ETC/TC 14 N/A
- NSAI/ETC/TC 16 are active and continue to participate in CELELEC. The Chair travelled to the CENELEC TC 210 plenary meeting in Brussels in April and attended the CLENELEC TC 210 plenary meeting in December remotely.
- NSAI/ETC/TC 18 members are continuing to engage directly with IEC/TC 114 technical bodies. NSAI has maintained an above average representation on the international mirrored committee for Marine Energy relative to ETC technical committees in other areas. There are currently 16 IE experts directly involved in various IEC/TC 114 technical bodies). The Chair attended the IEC/TC 114 plenary meeting in Edinburgh, and members of the committee attended meetings of related technical bodies that took place that week. James Kelly was appointed convenor of AHG 10 - Electrical power quality requirements.
- NSAI/ETC/TC 20 is continuing to review the scope of this committee to reflect the interests of the committee members. Some areas have been descoped due to membership changes and feedback.
- NSAI/ETC/TC 21 held 4 meetings in 2023 and the Chair travelled to Paris to attend the IEC TC 101, Electrostatics Plenary meeting.
- NSAI/ETC/TC 22 high levels of engagement with IEC/TC 111 & CLC/TC 111X. The committee had a presentation on the changes taking place to the Batteries Regulation. Members attended the plenary meetings of IEC/TC 111x remotely.
- NSAI/ETC/RCDTF appointed a new Chair at the start of 2023. 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 Alternate.
- The IEC Young Professionals Programme took place this year from Cairo, Egypt. NSAI sent two representatives from Ireland, however as the meeting was a fully virtually meeting the Young Professionals were unable to travel Cairo and took part in the event remotely.
- 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 2 technical experts attend technical meetings held during the IEC General meeting remotely, 2 NSAI staff attended the remote governance meetings, and the 2 young professionals took part online.

5.2.3 IEC P & O Membership Status

In 2023 NSAI Membership status was changed from a Participating or Observer Member to not following 11 technical committees.

Committee	Description
TC 59/SC 59A	Electric dishwashers
TC 59/SC 59K	Performance of household and similar electrical cooking appliances
TC 8/SC 8C	Network Management in Interconnected Electric Power Systems
TC 14	Power transformers
TC 48	Electrical connectors and mechanical structures for electrical and electronic equipment
TC 72	Automatic electrical controls
TC 105	Fuel cell technologies
TC 13	Electrical energy measurement and control
TC 21	Secondary cells and batteries
TC 38	Instrument Transformers
TC 82	Solar photovoltaic energy systems

In 2023 NSAI became a Participating member of the following 6 technical committees

Committee	Description
TC 115	High Voltage Direct Current (HVDC) transmission for DC voltages above 100 Kv (P member)
SyC SET	Sustainable Electrified Transportation
TC 78	Live Working
TC 81	Lightning protection
TC 2	Rotating machinery
TC 95	Measuring relays and protection equipment

NSAI are currently a P "Participating" member to 58 IEC Technical committees and an O "Observer" member in 63 IEC Technical Committees. Total 121

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 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	O-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	P-Member
TC 61	Safety of household and similar electrical appliances	P-Member
TC 61/SC 61B	Safety of microwave appliances for household and commercial use	O-Member
TC 61/SC 61C	Safety of refrigeration appliances for household and commercial use	O-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	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 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 SET	Sustainable Electrified Transportation	P-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 2023, our expert attended the following SyC SET meetings:

- 22nd – 24th March 2023 Berlin, Germany (attended in person)
- 19th – 21st September 2023 Milan, Italy (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:
PublishedStandards_Amanda-Jane - Power BI

- 270 as I.S. EN IEC
- 2 as NSAI/CEN/CLC/TR
- 1 as NSAI/CLC/TS
- 3 as NSAI/HD
- 1 as I.S. EN ISO/IEC
- 2 as I.S. EN IEC/IEEE

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 2024 onwards

For 2024, 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.