

# ANNUAL REPORT 2024

NSAI TECHNICAL COMMITTEES (NSAI/ETC/TC 4 – SWITCHGEAR, CONTROL GEAR AND ASSOCIATED EQUIPMENT)

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## 1 Chair Statement

In terms of new members and IEC International meetings both hybrid and face to face, the NSAI ETC TC 4 team had a very successful 2024.

NSAI ETC TC 4 made the commitment to carry out four meetings and the face-to-face option is allowing for a better relationship and a more positive outcome (team building). The committee members have grown in strength, with nineteen members and an array of experts from all areas of switchgear, control gear and associated equipment industry.

The committee agreed again that four meetings will take place in 2025, with the hybrid option.

Two new areas to be followed are IEC TR 63482 for switchgear maintenance and one new member has shown a keen interest in the IEC 61439 part 6 for busbar trunking.

There was one IEC face to face meeting attended in Barcelona in November and the report back to the NSAI ETC TC 4 committee member has really opened dialogue and discussions on new area we should keep an eye on, from this there is a focus on our comments and default status where a member takes the time to review any document and regardless of, if there are comments or not, we as a team will agree or comment rather than just default or abstain.

Committee members showed great contribution, experience, and interest to NSAI ETC TC 04 future goals.

Many Thanks to all involved and I look forward to 2025.

Paul Hyland

Chair of NSAI ETC TC 04.

### 2 Introduction

NSAI/ETC/TC 4 is the national mirror committee responsible for coordinating Ireland's engagement in the development of international standards for low-voltage switchgear including their assemblies.

## 3 Scope of TC

To support the development of national and international Standards for low-voltage switchgear and controlgear equipment for industrial, commercial, and similar use rated below or equal to 1 kV a.c. and 1,5 kV d.c. electromechanical as well as semiconductor (solid state) equipment. The scope includes open and enclosed separate items of equipment as well as assemblies which are the combinations of items of equipment into complete functional units.

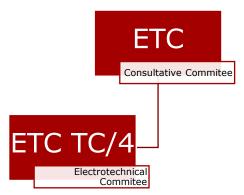
The committee mirrors the following international committees:

Committee Name	Committee Title
IEC/TC 121	Switchgear and controlgear and their assemblies for low voltage
IEC/SC 121A	Low-voltage switchgear and controlgear
IEC/SC 121B	Low-voltage switchgear and controlgear assemblies
CLC/TC 121A	Low-voltage switchgear and controlgear
CLC/SR 121B	Low-voltage switchgear and controlgear assemblies
<b>CLC/SR 121</b>	Switchgear and controlgear and their assemblies for low voltage

# 4 Structure and Membership

### 4.1 Structure

The Figure below illustrates the structure of the Committee:



### 4.2 Members

The committee welcomed three new members during 2024. The table below list the members represented on the committee for the year:

Organisation	Role
ABB	National chairperson
AECI	National committee member
Anord Mardix	National committee member
BCEI	National committee member
Capital Switch Gear	National committee member
Collen	National committee member
EMDA / EIFI	National committee member
ESB	National committee member
ESTA	National committee member
Finning	National committee member
Hager	National committee member
Hanley Energy	National committee member
Hitachi Energy	National committee member
NSAI	National secretary
RFE	National committee member
Schneider Electric	National committee member
Siemans	National committee member
SK biotek Ireland	National committee member
Vertiv	National committee member

# 5 Summary of 2024 Activities

#### 5.1 National

### 5.1.1 Meetings

The committee members opted for Hybrid meetings in 2024, with 1 meeting being fully virtual and the 3 meetings in hybrid form. The hybrid meetings were held using MS Teams and NSAI offices. The committee members attended the following national meetings:

Meeting No.	Date	Minutes Reference
1	2024/03/01	<u>N0703</u>
2	2024/07/05	<u>N0712</u>
3	2024/09/06	<u>N0717</u>
4	2024/11/29	<u>N0726</u>

#### 5.1.2 National Work

The committee are following the international work at IEC and CENELEC. The aim of the committee is to ensure Irish requirements are included in the international work and therefore no additional national work is required. The committee assisted in providing a response to a technical query in relation to IEC 61439-2.

## 5.2 International/Regional

#### 5.2.1 Meetings

Committee members attend the following international meetings in 2024:

Committee Name	Location	Date	No. of Attendees
IEC TC 121/PT 63482		19 <sup>th</sup> - 20 <sup>th</sup> March 2024	2
IEC / TC 121/ SC 121B MT 2	Barcelona	4 <sup>th</sup> – 5 <sup>th</sup> November 2024	1

#### 5.2.2 International/Regional Work

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

#### 5.2.3 International/Regional Standards Reviewed

The committee continue to review standards as they arise in IEC & CLC.

The committee has been actively attending IEC meeting in relation to IEC TC 121 PT 63482.

#### 5.2.4 International/Regional Voting

NSAI/ETC/TC 04 vote on all documents at IEC and CENELEC documents using a default voting strategy. The committee have actively voted on 39 documents in 2024 and have submitted 1 set of comments.

IEC/SC 121: Ireland has actively voted 11 times in 2024.

IEC/SC 121A: Ireland has actively voted 14 times in 2024.

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IEC/SC 121B: Ireland has actively voted 5 times in 2024.

CLC: Ireland has actively voted 9 times in 2024.

Body	Vote Reference	Comments Submitted	Decision	WIID
IEC	121/149/CDV	No	Abstain	
IEC	121/156/CD	No	No Comment	
IEC	121/160/DTR	No	Abstain	
IEC	<b>IEC</b> 121/162/DC		No Comment	
IEC	. ,		Comments Only	
IEC	121/169/CDV	No	Abstain	
IEC	121/172/CDV	No	Abstain	
IEC	121/174/FDIS	No	Abstain	
IEC	121/180/DC	No	No Comment	
IEC	121/181/CD	No	No Comment	
IEC	121/183/DC	No	No Comment	
IEC	121A/579/CDV	No	Abstain	
IEC	121A/586A/CD	No	No Comment	
IEC	121A/594/CD	No	No Comment	
IEC	121A/596/CD	No	No Comment	
IEC	121A/608/FDIS	No	Abstain	
IEC	121A/609/Q	Yes	Approve	
IEC	121A/610/Q	Yes	Approve	
IEC	<b>IEC</b> 121A/612/CDV		Abstain	
IEC	<b>IEC</b> 121A/614/CD		No Comment	
IEC	121A/622/CD	No	No Comment	
IEC	121A/623/CD	No	No Comment	
IEC	121A/631/Q	Yes	Revise	
IEC	121A/632/Q	Yes	Revise	
IEC	121A/633A/Q	Yes	Revise	
IEC	121B/199/CDV	No	Approve	
IEC	121B/201/CD	No	No Comment	
IEC	121B/202/DTS	No	No Comment	
IEC	121B/204/Q	Yes	Revise	
IEC	121B/205/CD	No	No Comments	
CLC	EN IEC 60947- 1:2021/prAA:2023	No	No Comment	77578
CLC	FprEN IEC 60947-2:2024	No	Abstain	71163
CLC	FprEN IEC 62683-2-3:2024	No	Abstain	77757
CLC	prEN IEC 60947-5-5:2024	No	Abstain	76180
CLC	prEN IEC 60947-7-1:2023	No	Abstain	75504
CLC	prEN IEC 61439-8:2024	No	Approve	77696
CLC	prEN IEC 62683-2-2:2024	No	Abstain	76090
CLC	prEN IEC 62683-2-3:2024	No	Abstain	77757
CLC	prEN IEC 63208:2024	No	Abstain	79511

## 5.3 Regulatory Development/Update

NSAI/ETC/TC 4 should remain aware of the following Regulations and Directives;

- Directive 2014/30/EU Electromagnetic Compatibility (EMC)
- Directive 2014/35/EU The Low Voltage Directive (LVD)
- Directive 2012/27/EU Energy efficiency
- I.S. 10101:2020+A1:2024- The National Rules for Electrical Installations

## 6 Irish Publications/Reviews

#### 6.1 Publications

The committee did not publish any deliverables this year.

#### 6.2 Reviews

No National reviews conducted this year.

## 7 Work programme for 2025 onwards

The committee will continue to explore the following areas for 2025:

- Committee to meet every quarter in 2025, first meeting in March.
- Expand membership to ensure the committee gets the benefit of a diverse industry expertise at all meetings.
- Consider the Prosumer distribution board of the future.
- I.S. 10101 update interaction, where NSAI ETC TC 04 has cross over.
- The committee will continue to attend and contribute at the IEC & CLC level throughout 2025 by reviewing, inputting Irish comments and voting on the various stages of standards development.

The number of work programmes taking place in the relevant IEC committees are listed and detailed below:

- IEC TC 121 4 work programmes,
- IEC TC 121A 9 work programmes,
- IEC TC 121B 3 work programmes.

### **IEC Work Programme:**

IEC	Project Reference	Title	Document Reference	Workin g Group	Fcst. Publ. Date
TC 121	IEC 62683-1 ED2	Low-voltage switchgear and controlgear - Product data and properties for information exchange - Part 1: Catalogue data	121/181/CD	WG 3	2026-04
TC 121	IEC 62683-2-2 ED1	Low-voltage switchgear and controlgear - Product data and properties for information exchange - Engineering data - Part 2-2: Switchgear and controlgear assembly objects for building information modelling	121/169/CDV	WG 3	2025-08
TC 121	IEC 63058 ED1	Switchgear and controlgear and their assemblies for low voltage - Environmental aspects	121/168/CD	WG 2	2026-05
TC 121	IEC 63208 ED1	Switchgear and controlgear and their assemblies for low voltage - Security aspects	121/172/CDV	WG 4	2025-10
TC 121A	IEC 60947-1 ED7	Low-voltage switchgear and controlgear - Part 1: General rules	121A/638/CD	MT 5	2026-04
TC 121A	<u>IEC 60947-</u> <u>3/AMD1 ED4</u>	Amendment 1 - Low-voltage switchgear and controlgear - Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units	121A/645/FDI S	MT 6	2025-05
TC 121A	IEC 60947-5-3 ED3	Low-voltage switchgear and controlgear - Part 5-3: Control circuit devices and switching elements - Requirements for proximity devices with defined behaviour under fault conditions (PDDB)	121A/614/CD	WG 3	2026-03
TC 121A	<u>IEC 60947-5-5</u> <u>ED2</u>	Low-voltage switchgear and controlgear - Part 5-5: Control circuit devices and switching elements - Electrical emergency stop device with mechanical latching function	121A/612/CD V	WG 3	2026-04
TC 121A	IEC 60947-6-1 ED4	Low-voltage switchgear and controlgear - Part 6-1: Multiple function equipment - Transfer switching equipment	121A/594/CD	MT 18	2026-03
TC 121A	IEC 60947-7-1 ED4	Low-voltage switchgear and controlgear - Part 7-1:	121A/646/FDI S	MT 8	2025-05



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	- NOTE THITTEE	r Report 2024		_	
		Ancillary equipment - Terminal blocks for copper conductors			
TC 121A	<u>IEC 60947-7-2</u> <u>ED4</u>	Low-voltage switchgear and controlgear - Part 7-2: Ancillary equipment - Protective conductor terminal blocks for copper conductors	121A/622/CD	MT 8	2026-12
TC 121A	IEC 60947-10 ED1	Low-voltage switchgear and controlgear - Part 10: Semiconductor Circuit-Breakers	121A/635/CD V	PT 60947- 10	2026-02
TC 121A	IEC 62091 ED2	Low-voltage switchgear and controlgear - Controllers for drivers of stationary fire pumps	121A/623/CD	MT 20	2026-12
TC 121B	<u>IEC 61439-6</u> <u>ED2</u>	Low-voltage switchgear and controlgear assemblies - Part 6: Busbar trunking systems (busways)	121B/205/CD	MT 3	2026-03
TC 121B	IEC 61439-8 ED1	Low-voltage switchgear and controlgear assemblies - Part 8: Assemblies for use in photovoltaic installations	121B/199/CD V	PT 61439-8	2025-10
TC 121B	<u>IEC TS 61641</u> <u>ED1</u>	Low-voltage switchgear and controlgear assemblies - Internal arc-fault protection of low-voltage switchgear and controlgear assemblies in accordance with the IEC 61439 series	121B/201/CD	PT 61641	2026-07

The number of work programmes taking place in the relevant CENELEC committees are listed and detailed below:

CLC TC 121A 21 work programmes,
CLC SR 121 4 work programmes,
CLC SR 121B 4 work programmes.

#### **CENELEC Work Programme:**

CLC TC	WI Number	Reference	Title
TC 121A	66447	EN IEC 60947-9- 2:2024	Low-voltage switchgear and controlgear - Part 9-2: Active arc-fault mitigation systems - Optical-based internal arc-detection and mitigation devices
TC 121A	70776	FprEN IEC 60947-5- 1:2023	Low-voltage switchgear and controlgear - Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices
TC 121A	71163	EN IEC 60947- 2:2025	Low-voltage switchgear and controlgear - Part 2: Circuit-breakers



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TC 121A	74305	FprEN IEC 60947-5- 7:2024	Low-voltage switchgear and controlgear - Part 5-7: Control circuit devices and switching elements - Proximity devices with analogue output
TC 121A	75196	FprEN IEC 61095:2023	Electromechanical contactors for household and similar purposes
TC 121A	75504	FprEN IEC 60947-7- 1:2025	Low-voltage switchgear and controlgear - Part 7-1: Ancillary equipment - Terminal blocks for copper conductors
TC 121A	75800	FprEN IEC 60947-4- 1:2023	Low-voltage switchgear and controlgear - Part 4-1: Contactors and motor-starters - Electromechanical contactors and motor-starters
TC 121A	75860	prEN IEC 60947- 10:2025	Low-voltage switchgear and controlgear - Part 10: Semiconductor Circuit-Breakers
TC 121A	75933	prEN IEC 60947-5-3	Low-voltage switchgear and controlgear - Part 5-3: Control circuit devices and switching elements - Requirements for proximity devices with defined behaviour under fault conditions (PDDB)
TC 121A	76180	prEN IEC 60947-5- 5:2024	Low-voltage switchgear and controlgear - Part 5-5: Control circuit devices and switching elements - Electrical emergency stop device with mechanical latching function
TC 121A	76204	EN IEC 60947- 3:2021/FprA1:2025	Amendment 1 - Low-voltage switchgear and controlgear - Part 3: Switches, disconnectors, switchdisconnectors and fuse-combination units
TC 121A	76205	FprEN IEC 62626- 1:2023	Low-voltage switchgear and controlgear enclosed equipment - Part 1: Additional requirements for enclosed switch-disconnectors in accordance with IEC 60947-3 - Isolation of electrical equipment during repair and maintenance work in specific applications
TC 121A	77039	prEN IEC 60947-1	Low-voltage switchgear and controlgear - Part 1: General rules
TC 121A	77091	EN IEC 60947-6- 2:202X/prAA	Low-voltage switchgear and controlgear - Part 6-2: Multiple function equipment - Control and protective switching devices (or equipment) (CPS)
TC 121A	77092	EN IEC 60947- 8:202X/prAA	Low-voltage switchgear and controlgear - Part 8: Control units for built-in thermal protection (PTC) for rotating electrical machines
TC 121A	77578	EN IEC 60947- 1:2021/prAA:2023	Low-voltage switchgear and controlgear - Part 1: General rules
TC 121A	77941	prEN IEC 60947-5- 1:2022/prAA	Low-voltage switchgear and controlgear - Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices
TC 121A	78555	prEN IEC 60947-7-1 {frag1}	1 - Low-voltage switchgear and controlgear - Part 7-1: Ancillary equipment - Terminal blocks for copper conductors
TC 121A	79510	prEN IEC 60947-6-1	Low-voltage switchgear and controlgear - Part 6-1: Multiple function equipment - Transfer switching equipment



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TC 121A	80318	prEN IEC 62091	Low-voltage switchgear and controlgear - Controllers for drivers of stationary fire pumps
TC 121A	80403	prEN IEC 60947-7-2	Low-voltage switchgear and controlgear - Part 7-2: Ancillary equipment - Protective conductor terminal blocks for copper conductors
SR 121	76090	prEN IEC 62683-2- 2:2024	Low-voltage switchgear and controlgear - Product data and properties for information exchange - Engineering data - Part 2-2: Switchgear and controlgear assembly objects for building information modelling
SR 121	76406	prEN IEC 63058	Switchgear and controlgear and their assemblies for low voltage - Environmental aspects
SR 121	77040	prEN IEC 62683-1	Low-voltage switchgear and controlgear - Product data and properties for information exchange - Part 1: Catalogue data
SR 121	79511	prEN IEC 63208:2024	Switchgear and controlgear and their assemblies for low voltage - Security aspects
SR 121B	74472	FprEN IEC 61439- 4:2023	Low-voltage switchgear and controlgear assemblies - Part 4: Particular requirements for assemblies for construction sites (ACS)
SR 121B	77076	prEN IEC 61439-6	Low-voltage switchgear and controlgear assemblies - Part 6: Busbar trunking systems (busways)
SR 121B	77696	prEN IEC 61439- 8:2024	Low-voltage switchgear and controlgear assemblies - Part 8: Assemblies for use in photovoltaic installations
SR 121B	79616	EN IEC 62208:2023/prA11	Empty enclosures for low-voltage switchgear and controlgear assemblies - General requirements

# 8 Additional Information

No additional information.