

ANNUAL REPORT 2024

NSAI TECHNICAL COMMITTEES (NSAI/ETC/RCDTF - RESIDUAL CURRENT DEVICES TASK FORCE)

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1 Chair Statement

The work of the NSAI/ETC/RCDTF continued throughout 2024 with our task force meeting three times on-line during the year. Our meetings included matters such as formal reporting on attendance at various IEC and CENELEC meetings, matters arising from same and discussions/decisions on voting positions. Throughout the year we continued to vote and send representatives to all relevant IEC and CENELEC on-line meetings, with the primary focus on IEC TC23E WG 8 where the views of the committee were well represented.

Looking ahead to 2025 we see the continued focus on IEC TC23E WG 8 and IEC TC23E WG 2 regarding the recent development of the IEC 63053-2 ED1 for DC-RCCBs.

The committee would like to take the opportunity to thank Amanda-Jane Gainford for her tireless and good-humoured assistance throughout the year, more recently her guidance with the new IEC Online Standards Development (OSD) platform has been and will continue to be invaluable. We all look forward to her continued support for the coming year.

Donal O'Brien (Chair of NSAI ETC RCDFT)

2 Introduction

NSAI/ETC/RCDTF is responsible for monitoring the work of CLC TC23E and IEC SC23E in so far as it relates to RCDs and for providing appropriate advice to NSAI.

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/RCDTF engages with CENELEC TC23E and IEC TC 23/SC 23E. NSAI/ETC/RCDTF works to ensure that Irish concerns are considered during the creation and maintenance of standards at IEC and CENELEC level.

3 Scope of TC

NSAI/ETC/RCDTF Task Force is responsible for monitoring the work of CLC TC23E and IEC TC 23 SC23E in so far as it relates to RCDs and for providing appropriate advice to NSAI.

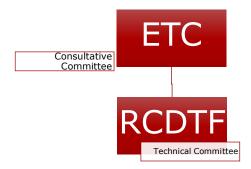
The committee mirrors the following international committees:

| Committee Name | Committee Title | | | | |
|-------------------------|--|--|--|--|--|
| CLC/TC 23E | Circuit breakers and similar devices for household and similar | | | | |
| | applications | | | | |
| IEC/TC 23/SC 23E | Circuit-breakers and similar equipment for household use. | | | | |

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 of the committee for the year:

| Organisation | Role | |
|--------------|---------------------------|--|
| NSAI | SECRETARY | |
| Littel Fuse | Chair | |
| ESB | National committee member | |
| Siemens | National committee member | |
| EV HACS | National committee member | |

5 Summary of 2024 Activities

5.1 National

5.1.1 Meetings

Committee Members attended the following virtual National meetings in NSAI:

| Meeting No. | Date | Minutes Reference |
|-------------|------------|-------------------|
| 1 | 2024/03/04 | <u>N686</u> |
| 2 | 2024/07/08 | <u>N690</u> |
| 3 | 2024/09/25 | <u>N696</u> |

5.1.2 National Work

The committee are not developing any national work at present but are actively inputting Irish concerns into IEC & CENELEC development work at both CLC TC23E and IEC TC 23 SC23E.

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 |
|----------------|----------|------------|------------------|
| IEC TC23E WG 8 | Virtual | 2024/02/12 | 2 |
| IEC TC23E WG 8 | Virtual | 2024/02/23 | 1 |

5.2.2 International/Regional Work

The TF continue to monitor the work internationally had provide input as necessary.

5.2.3 International/Regional Standards Reviewed

The committee are following the work programmes covered by IEC/TC 23/ SC23E.

5.2.4 International/Regional Voting Results

The committee have actively voted on 9 documents in 2024 and have submitted 1 set of comments.

Active votes were broken down into 9 IEC documents & 0 CENELEC documents.

| Body | Vote Reference | Comments Submitted | Decision | WIID |
|------|----------------|-----------------------|----------|------|
| IEC | 23E/1334/DC | No | Approve | |
| IEC | 23E/1343/NP | No | Approve | |
| IEC | 23E/1368/FDIS | No | Default | |
| IEC | 23E/1369/FDIS | No | Default | |
| IEC | 23E/1370/FDIS | No | Default | |
| IEC | 23E/1371/FDIS | No | Default | |
| IEC | 23E/1372/FDIS | No | Default | |
| IEC | 23E/1373/FDIS | No | Default | |
| IEC | 23E/1356/CD | Yes | Approve | |

5.3 Regulatory Development/Update

No work in this area.

6 Irish Publications/Reviews

6.1 Publications

The committee did not publish any deliverables this year.

6.2 Reviews

No National documents to be reviewed.

7 Work programme for 2025 onwards

The RCD TF will continue to maintain a high level of engagement with IEC (SC23E) and CENELEC (TC23). As a Task Force, we will continue to monitor amendments and reforms and actively engage with the standards bodies through the various working groups. A sample of the areas where work is planned can be seen below.

The TF committee will continue to hold meetings at least once per quarter and continue to convene more frequently, as needs arise, in advance of official WG meetings to discuss, propose and prepare comments on relevant issues.

The TF will continue its practice of circulating proposed comments and amendments prior to our scheduled committee meetings to enable thorough engagement by our members and the efficient running of meetings and ensure timely voting.

As a Task Force we will be actively engaged in, but not limited to, developments in the IEC, CENELEC and other National matters through the relevant working groups dealing with the associated standards, as follows:

7.1 IEC:

7.1.1 IEC/TC23/SC23E/WG2:

Shock-hazard protective devices, arc-fault detection devices, residual current monitors and other protection devices.

WG2 have a work programme for the following standards:

IEC 62423 ED3

Type F and type B residual current operated circuit-breakers with and without integral overcurrent protection for household and similar uses.

Currently in progress with edition 3 publication estimated 1-1.5 Years. Note this is first time the committee is working with new OSD tool.

• IEC 63053-2 ED1

Residual current operated circuit-breakers for household and similar uses for dc systems - Part 2: Residual current operated circuit breakers without integral overcurrent protection (DC-RCCBs).

The standard is now under development. The applications are all limited to 440V DC within the scope of this standard. Estimated timeframe for publication: >1.5 years.

IEC 61008-1 2024

Stability Date - 2029

Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs)

• IEC 61009-1 2024

Stability Date - 2029

Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs)

IEC 62606:2013+AMD1:2017+AMD2:2022

Stability Date - 2026

General requirements for arc fault detection and protection devices (AFDDs)

IEC 61543

Stability Date - 2026

Residual current-operated protective devices (RCDs) for household and similar use - Electromagnetic compatibility

7.1.2 IEC/TC23/SC23E/WG7:

Protective devices for the charging of electrical vehicle

WG 7 is dormant at present.

• IEC 62752:2024

Stability Date - 2028

In-cable control and protection device (IC-CPD) for mode 2 charging of electric road vehicles

7.1.3 IEC/TC23/SC23E/WG8:

Protective devices for battery powered vehicle applications

WG8 have a work programme for the following standards:

• IEC 62955 ED2

Residual direct current detecting device (RDC-DD) to be used for mode 3 charging of electric vehicles.

A comprehensive revision of this standard is now underway and has been the main focus of attention for the committee during 2024 and will continue to be until the FDIS is prepared – estimated sometime in 2026.

7.1.4 IEC/TC23/SC23E/WG10:

Product data

The Task Force is not following work in this area.

7.1.5 IEC/TC23/SC23E/WG12:

Protective devices based on semiconductor technology for household and similar use.

The Task Force is not currently following work in this area. However, interest has been expressed by the Task force and so more active participation in this work may start in 2025.

7.2 CENELEC

7.2.1 CLC/TC23E/WG1

This WG mirrors the development of the IEC standards mentioned above.

There have been many recent revisions of the IEC standards mentioned below within the past 18-24 months and as a result the committee is keeping close attention on the harmonized versions that follow within the CENELEC framework.

- EN61008 Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) Part 1: General rules (RCCBs)
- EN61009 Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs) Part 1: General rules (RCBOs)
- EN61540 Standard for Portable Residual Current Devices

- EN61543 Standard for EMC tests for RCDs
- EN62020 Standard for Residual Current Monitors
- EN62606 General requirements for Arc Fault Detection Devices
- HD62640 Residual current devices with or without overcurrent protection for socketoutlets for household and similar uses

7.3 National Work Item

7.3.1 NSAI Publications

None

8 Additional Information

No additional information.