



NSAI

ANNUAL REPORT 2020

NSAI TECHNICAL COMMITTEES
(NSAI/ETC/TC 03)

Contents

| | | |
|-------|---|---|
| 1 | Chairman's Statement | 3 |
| 2 | Introduction | 3 |
| 3 | Scope of TC..... | 3 |
| 4 | Structure and Membership | 4 |
| 4.1 | Structure | 4 |
| 4.2 | Members | 5 |
| 4.2.1 | Members of NSAI/ETC/TC 03/SC 01 | 5 |
| 4.2.2 | Members of NSAI/ETC/TC 03/SC 02 | 6 |
| 5 | Summary of 2020 Activities | 6 |
| 5.1 | National | 6 |
| 5.1.1 | Meetings | 6 |
| 5.1.2 | National Work..... | 6 |
| 5.2 | International/Regional | 7 |
| 5.2.1 | Meetings | 7 |
| 5.2.2 | International/Regional Work | 7 |
| 5.2.3 | International/Regional Standards Reviewed | 7 |
| 5.2.4 | International/Regional Voting Results | 7 |
| 5.3 | Regulatory Development/Update | 7 |
| 6 | Irish Publications/Reviews..... | 8 |
| 6.1 | Publications | 8 |
| 6.2 | Reviews | 8 |
| 7 | Work programme for 2021 onwards | 8 |
| 8 | Additional Information | 9 |

1 Chairman's Statement

2020 was a year of active consolidation and transformation for the committee following the publication of S.R. 61936:2019, in 2019. The committee held nine meetings over 2020.

In 2020, the committee has been reviewing the contents of the 'Standard Recommendation', identifying areas for improvement.

The committee took over the monitoring of standards that were the preserve of NSAI/ETC/TC 19, which recently disbanded. We have also agreed to take on the development of Irish National Normative Aspects NNA to EN 50341-1.

The global pandemic transformed our collective engagements into the Virtual world of MS Teams meetings with considerable success; ably assisted by our NSAI colleagues. For the first time, committee members also contributed substantially to the work of our associated international committees and working groups.

Membership and contributions of the committee is very healthy. We expect to further expand the scope of the Committee's activities in 2021.

2 Introduction

NSAI/ETC/TC 03 is the technical committee responsible for preparing national installation standards for High Voltage power installations (exceeding 1 kV a.c. or 1,5 kV d.c.) located indoors or outdoors, including earthing. In 2019, the committee published a Standard Recommendation S.R. 61936:2019, "Guidelines on the application of I.S. EN 61936-1:2010&A1:2014, Power installations exceeding 1 kV a.c. - Part 1: Common rules".

The committee are responsible for the maintenance of S.R. 61936.

The committee has two Subcommittees which reports into it.

- NSAI/ETC/TC 03/SC 01 "Overhead electrical lines exceeding 1kVa.c.

This subcommittee was established to develop the Irish National Normative Aspects NNA to EN 50341-1 "OVERHEAD ELECTRICAL LINES EXCEEDING AC 1 KV - PART 1: GENERAL REQUIREMENTS - COMMON SPECIFICATIONS", which will be I.S. EN 50341-2-11 "Overhead Electrical Lines Exceeding AC 1 KV - Part 2-1: National Normative Aspects (NNAs) For Ireland (based On EN 50341-1)"

- NSAI/ETC/TC 03/SC 02 "Insulators and surge Arresters"

As a result of restructuring within the Electrotechnical sector of NSAI, NSAI/ETC/TC 19 was disbanded and reformed as a subcommittee NSAI/ETC/TC 03/SC 02.

3 Scope of TC

NSAI/ETC/TC 03 is the Technical Committee responsible for preparing national installation standards for High Voltage power installations (exceeding 1 kV a.c. or 1,5 kV d.c.) located indoors or outdoors, including earthing. The standard specifies the design requirements of the installation, and the selection and erection of electrical equipment in order to ensure the safety of persons and the proper operation of the installation. The installation standard is not applicable to factory built and type tested equipment but is relevant to the installation of this equipment. The installation requirements are not applicable to overhead and underground lines between separate installations. Thus, the work of the committee is analogous to the work of NSAI ETC

TC2 'Electrical Installations' which develops and maintains the requirements for installations connected at low voltage. The two committee's co-ordinate closely on interface issues.

The committee mirrors the following international committees:

| Committee Name | Committee Title |
|---------------------|--|
| IEC TC 99 | Insulation co-ordination and system engineering of high voltage electrical power installations above 1,0 kV AC and 1,5 kV DC |
| IEC TC 11 | Overhead lines |
| IEC PC 127 | Low-voltage auxiliary power systems for electric power plants and substations |
| IEC PC 128 | Operation of electrical installations |
| CLC BTF 62-3 | Operation of electrical installations |
| CLC TC 11 | Overhead electrical lines exceeding 1kV a.c. (1.5kV d.c.) |
| CLC TC 99X | Power installations exceeding 1 kV a.c. (1,5 kV d.c) |

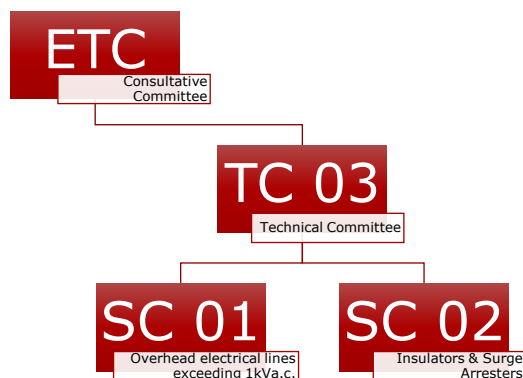
Subcommittee NSAI/ETC/TC 03/SC 02 mirrors the following international committees:

| Committee Name | Committee Title |
|-------------------|---|
| IEC TC 36 | Insulators |
| IEC SC 36A | Insulated bushings |
| IEC TC 37 | Surge arresters |
| IEC SC 37A | Low-voltage surge protective devices |
| IEC SC 37B | Components for low-voltage surge protection |
| CLC TC 36A | Insulated bushings |
| CLC TC 37A | Low-voltage surge protective devices |

4 Structure and Membership

4.1 Structure

The Figure below illustrates the structure of the Committee:



4.2 Members

The list below are the members for the year:

| Name | Organisation | Role | Initials |
|----------------------|---|---------------------------------|-----------------|
| Amanda-Jane Gainford | (NSAI) | National secretary | AJG |
| Andrew Coffey | (MOTTMAC) | National committee member | AC |
| Brendan Redington | (HSE) | National committee member | BR |
| Brian Perry | (ESBI) | National committee member | BP |
| Chris McLoughlin | (IET) | National committee member | CMcL |
| Ciaran Allen | (Consultant) | National committee member | CA |
| CJ Roy | (ESBI) | National committee member | CR |
| Colm Twomey | (ESBI) | National committee member | CT |
| Dejan Stojanovic | (SIRO) | National committee member | DS |
| Dermot Dorgan | (ESBI) | National committee member | DD |
| Eamon Sheehan | (H&MV Engineering) | National committee member | ES |
| Hugh Cunningham | (ESBI) | National committee member | HC |
| James Moran | (Suir Engineering) | National committee member | JM |
| John Egan | (MDS) | National committee member | JE |
| John Whelan | (ESBI) | National committee member | JW |
| Kenny McDonnell | (ESB) | National committee member | KMcD |
| Kevin O'Connor | (ESB) CHAIR | National chairperson | KOC |
| Kieran French | (Eirgrid) | National committee member | KF |
| Michael Maher | (ESB) | National committee member | MM |
| Michael O'Hara | (AECI) | National committee member | MOH |
| Neil Cowap | (AECOM) | National committee member | NCP |
| Noleen Campbell | (NSAI) | National secretary support team | NC |
| Padraig Delaney | (HSA) | National committee member | PD |
| Padraig Plunkett | (Consultant) (Liaison Engineers Ireland) | National committee member | PP |
| Paul Moran | (Eirgrid) | National committee member | PM |
| Philip Hicks | (Hivar Engineering) | National committee member | PH |
| Tom Keane | (MOTTMAC) | National committee member | TH |

4.2.1 Members of NSAI/ETC/TC 03/SC 01

| Name | Organisation | Role | Initials |
|----------------------|---------------------|---------------------------|-----------------|
| Amanda-Jane Gainford | (NSAI) | National Secretary | AJG |
| Brian Gallagher | (ESB) | National Committee Member | BG |
| David Tuohy | (ESB) | National Committee Member | DT |
| John Lucey | (ESB) | National Committee Member | JL |
| Ken Atkinson | (ESB) | National Committee Member | KA |
| Paul Shiel | (ESB) | National Committee Member | PS |
| Peter Ennis | (ESB) | National Committee Member | PE |
| Timothy Condon | (ESB) | National Committee Member | TC |

4.2.2 Members of NSAI/ETC/TC 03/SC 02

| Name | Organisation | Role | Initials |
|--------------------|-------------------------------|---------------------------|----------|
| Noleen Campbell | (NSAI) | National secretary | AJG |
| Timothy Condon | (ESB) | National Chairperson | TC |
| Patrick Fitzgerald | (TE CONNECTIVITY IRELAND LTD) | National Committee Member | PF |
| Paul Shiel | (ESB) | National Committee Member | PS |

5 Summary of 2020 Activities

5.1 National

The full Technical Committee met four times in 2020. A working group was set up to examining any editorial or technical changes which may be needed in S.R. 61936. This working group met five times in 2020 and will continue the review of S.R. 61936 in 2021.

Following on from the publication of S.R. 61936, a number of public awareness activities and events were held during 2020. This include the socialising of the Standard Recommendation through social media platforms as well as traditional media trade magazines. Lectures were given to organisations such as IET Ireland in order to engage directly with stakeholders and raise public awareness about the contents relevant to Irish industry.

5.1.1 Meetings

Committee members attended the following national meetings in NSAI as follows:

| Meeting No. | Date | Minutes Reference |
|-------------|--------------------------------|-----------------------|
| 1 | 13 th February 2020 | N1132 |
| 2 | 28 th May 2020 | N1141 |
| 3 | 13 th August 2020 | N1163 |
| 4 | 19 th November 2020 | N1181 |

An Ad-hoc subcommittee working on S.R.61936 met as follows:

| Meeting No. | Date | Minutes Reference |
|-------------|-------------------------------|-----------------------|
| 1 | 18 th June 2020 | N1145 |
| 2 | 26 th August 2020 | N1156 |
| 3 | 1 st October 2020 | N1168 |
| 4 | 5 th November 2020 | N1169 |
| 5 | 10 th December | N1185 |

5.1.2 National Work

The committee reviewed S.R. 61936 during the 2nd half of 2020.

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 TC 99 Plenary | Virtual | 2020-10-05 | 3 (AJG, CMcL, PP) |
| IEC/TC 99/MT 4 | Virtual | 2020-09-29 | 2 (PP, HC) |
| | | 2020-09-30 | 2 (PP, HC) |
| | | 2020-10-01 | 2 (PP, HC) |
| | | 2020-10-27 | 2 (PP, HC) |
| | | 2020-10-28 | 2 (PP, HC) |
| | | 2020-11-05 | 1 (PP) |
| | | 2020-11-06 | 2 (PP, HC) |
| IEC/PC/127 | No meetings held in 2020 | N/A | N/A |
| IEC/PC/127 WG 2 | No meetings held in 2020 | N/A | N/A |
| IEC/PC/127 WG 4 | No meetings held in 2020 | N/A | N/A |
| IEC/PC/127 ahG 1 | No meetings held in 2020 | N/A | N/A |
| CLC/BTTF 62-3 | No meetings attended | N/A | N/A |
| CLC/TC 11/WG 09 | No meetings held in 2020 | N/A | N/A |
| CLC/TC 99X/WG 01 | Zoom Meeting | 27/03/2020 | N/A |

5.2.2 International/Regional Work

The newly established international project committee IEC PC 127 "Low-voltage auxiliary power systems for electric power plants and substations" was also brought within the scope of the NSAI/ETC/TC03 and a representative from the National Mirror Committee was nominated to the Chair of IEC PC 127.

5.2.3 International/Regional Standards Reviewed

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

5.2.4 International/Regional Voting Results

The committee actively voted on 9 documents in 2020.

IEC/TC 99 x 3

IEC/PC 127 x 5

CLC/TC 99X X 1

5.3 Regulatory Development/Update

The committee would like to have S.R. 61936 cited. No progress has been made to date on this.

6 Irish Publications/Reviews

6.1 Publications

The Committee did not publish any deliverables this year.

6.2 Reviews

The Committee reviewed the following Irish national deliverables: S.R. 61936-1:2019

7 Work programme for 2021 onwards

The committee will continue attendance and contribution at IEC & CLC level throughout 2021. The committee are exploring the following areas for 2021:

- Gap analysis of S.R. 61936 for work prioritisation for next edit
- Inclusion of Ireland requirements into CLC & IEC Standards
- Plan to have S.R. 61936 referenced in Guide to the Safety, Health & Welfare at Work (General Applications) Regulations 2007, Part 3 "Electricity".
- Expansion of NSAI/ETC/TC 03 scope into the areas of competence and design certification
 - Proposal is that NSAI/ETC/TC 03 should concentrate on developing both standards including design certification and the area of competence.
 - Next revision of I.S. EN 50110

8 Additional Information



FIGURE 1: MS TEAMS COMMITTEE MEETING