



**NSAI**

# ANNUAL REPORT 2021

NSAI TECHNICAL COMMITTEES  
(NSAI/ETC/TC 03)

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## 1 Chairman's Statement

2021 was a combination of "business as usual" and new work areas for the committee. The committee held 11 meetings over 2021.

In 2021, the committee has reviewed the contents of the 'Standard Recommendation' S.R. 61936, identifying areas for improvement, to align with the next revision of EN 61936. Work progressed in 2021 with TC 99X, the working group on earthing, and PC 127, a working group on low voltage wiring in HV substations.

The committee took on new work in relation to EN 50110, the equivalent of S.R. 61936 in the area of Operations and Maintenance.

Committee members continued to contribute substantially to the work of our associated international committees and working groups.

New initiatives to support Climate Action began with presentations on new technologies such as Distributed Energy Resource Management Systems (DERMS). We expect this area to be a feature in coming years.

Membership and contributions of the committee is very healthy. We will have a busy set of activities in 2022.

## 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 TC 2 'Electrical Installations' which develops and maintains the requirements for installations connected at low voltage. The two committee's co-ordinate closely on interface issues.

NSAI/ETC/TC 03 propose to expand their scope in 2022 and have a proposal to be approved by NSAI/ETC Committee in February 2022.

The committee mirrors the following international committees:

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

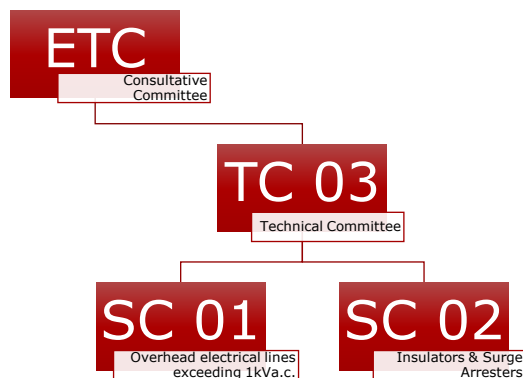
Subcommittee NSAI/ETC/TC 03/SC 02 mirrors the following international committees:

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

Organisation	Role
ESB CHAIR	National chairperson
ABB	National committee member
AECI	National committee member
Consultant	National committee member
Consultant & Liaison Engineers Ireland	National committee member
Eirgrid	National committee member
ESB Networks	National committee member
ESBI	National committee member
H&MV Engineering	National committee member
Hivar Engineering	National committee member
HSA	National committee member
HSE	National committee member
IET	National committee member
Independent Consultant	National committee member
MDS	National committee member
MOTTMAC	National committee member
PSC Ireland	National committee member
SIRO	National committee member
Suir Engineering	National committee member
ESB Engineering and Major Projects EMP	National committee member
Independent Consultant	National Observer
NSAI SECRETARY	National secretary

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

Organisation	Role
NSAI	National Secretary
ESB	National Committee Member

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

Organisation	Role
NSAI	National secretary
ESB	National Chairperson
TE CONNECTIVITY IRELAND LTD	National Committee Member
ESB	National Committee Member

## 5 Summary of 2021 Activities

### 5.1 National

The full Technical Committee met 4 times in 2021. A working group was set up to examining any editorial or technical changes which may be needed in S.R. 61936 and to review EN 50110. This working group met 7 times in 2021 and will continue the review of S.R. 61936 in 2022.

## 5.1.1 Meetings

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

Meeting No.	Date	Minutes Reference
1	28 <sup>th</sup> January 2021	<a href="#">N1202</a>
2	11 <sup>th</sup> March 2021	<a href="#">N1214</a>
3	10 <sup>th</sup> June 2021	<a href="#">N1245</a>
4	28 <sup>th</sup> October 2021	<a href="#">N1257</a>

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

Meeting No.	Date	Minutes Reference
1	19 <sup>th</sup> January 2021	<a href="#">N1189</a>
2	16 <sup>th</sup> February 2021	<a href="#">N1204</a>
3	15 <sup>th</sup> March 2021 (EN50110)	N/A
4	1 <sup>st</sup> April 2021	<a href="#">N1215</a>
5	13 <sup>th</sup> May 2021	<a href="#">N1227</a>
6	11 <sup>th</sup> November 2021	<a href="#">N1260</a>
7	2 <sup>nd</sup> December 2021	<a href="#">N1261</a>

## 5.1.2 National Work

The committee reviewed S.R. 61936 during the 2021.

## 5.2 International/Regional

### 5.2.1 Meetings

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

Committee Name	Location	Date	Attended
IEC TC 99 Plenary	Virtual	2021/10/21	AJ, PP
IEC/TC 99/MT 4	Virtual	2021/09/29	N/A
IEC/PC/127 Plenary	Virtual	2021/10/12 2021/10/13	CJ Roy
IEC/PC/127 WG 2	Virtual		N/A
IEC/PC/127 WG 4	Virtual		N/A
IEC/PC/127 ahG 1	Virtual		N/A
IEC/PC/128 Plenary	Virtual	2021/10/20 2021/10/21	PP PP
CLC/BTTF 62-3	Virtual	2021/03/16 2021/04/16 2021/05/12 2021/08/31	PP PP PP PP

CLC/TC 11/WG 09	Virtual		N/A
CLC/TC 99X/WG 01	Virtual		N/A
IEC TC 36	Virtual		N/A
IEC SC 36A	Virtual		N/A
IEC TC 37	Virtual		N/A
IEC SC 37A	Virtual		N/A
IEC SC 37B	Virtual		N/A
CLC TC 36A	Virtual		N/A
CLC TC 37A	Virtual		N/A

## 5.2.2 International/Regional Work

The newly established international project committee IEC PC 128 " Operation of electrical installations" was also brought within the scope of the NSAI/ETC/TC03 and a representative from the National Mirror Committee was nominated to the Convenor of IEC/PC 128/WG 01.

## 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 61936 and have been attending CLC meetings in relation to EN 50110.

## 5.2.4 International/Regional Voting Results

The committee actively voted on 4 documents in 2021.

Body	Vote Reference	Comments Submitted	Decision	WIID
IEC	99/311/FDIS	No	Approve	
IEC	99/313/Q	Yes	Approve	
CLC	FprEN 50522	No	Approve	66575
CLC	FprEN IEC 61936-1:2021	No	Approve	68945

## 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 2022 onwards

The committee will continue attendance and contribution at IEC & CLC level throughout 2022. The committee are exploring the following areas for 2022:

- Gap analysis of S.R. 61936 for work prioritisation for next edit
- Exploring the possibility of adding Chapter 11 to the IEC document
- Continue to work on 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".
- Continue the work proposed in 2021 that NSAI/ETC/TC 03 should concentrate on developing both standards including design certification and the area of competence.
- Continue to input into the next revision of I.S. EN 50110
- The committee have a proposal for the expansion of their scope for consideration by NSAI/ETC Committee in February 2022

## 8 Additional Information

No additional information to add.