



**NSAI**

# ANNUAL REPORT 2021

NSAI TECHNICAL COMMITTEE  
NSAI/ETC/TC 20 - "SMART GRIDS,  
RENEWABLES, ELECTRIC VEHICLES  
AND ENERGY EFFICIENCY"

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## 1 Chair Statement

The Chairman expresses his thanks and appreciation to all members of NSAI/ETC/TC 20 for their participation, support and contributions to the work of NSAI/ETC/TC 20, during a very challenging period.

## 2 Introduction

NSAI/ETC/TC 20 was established as a National Mirror Committee to mirror the work of several European and international standards committees in the area of Smart Grids, Renewables, Electric Vehicles and Energy Efficiency. The list of committees currently being followed in full or in part is listed in paragraph 3.

## 3 Scope of TC

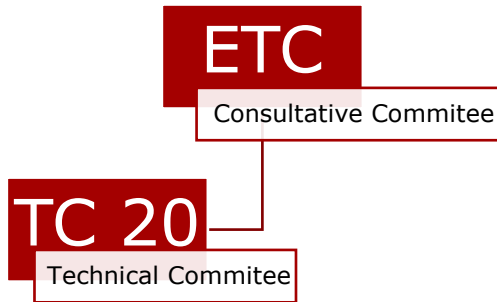
The scope of NSAI/ETC/TC 20 is to follow and contribute to the work of the CENELEC and IEC committees listed below.

Committee Name	Committee Title
<b>CENELEC TC 8X</b>	Systems aspects of electrical energy supply
<b>CENELEC TC 13</b>	Electrical energy measurement and control
<b>CENELEC TC 21X</b>	Secondary cells and batteries
<b>CENELEC TC 22X</b>	Power electronics
<b>CENELEC TC 23H</b>	Industrial plugs and socket outlets
<b>CENELEC TC 57</b>	Power systems management and associated information exchange
<b>IEC TC 57</b>	Power systems management and associated information exchange
<b>CENELEC TC 64</b>	Electrical installations and protection against electric shock
<b>CENELEC TC 69X</b>	Electric systems for electric road vehicles
<b>IEC TC 69</b>	Electrical power/energy transfer systems for electrically propelled road vehicles and industrial trucks
<b>CENELEC TC 72</b>	Automatic electrical controls
<b>CENELEC TC 82</b>	Solar photovoltaic energy systems
<b>CENELEC TC 88</b>	Wind Energy
<b>IEC TC 88</b>	Wind Energy
<b>CENELEC TC 95X</b>	Measuring relays and protection equipment
<b>IEC TC 120</b>	Electrical Energy Storage (EES) Systems
<b>CEN-CENELEC-ETSI CG-SG</b>	CEN-CLC-ETSI Co-ordination Group on Smart Grid

## 4 Structure and Membership

### 4.1 Structure

The Figure below illustrates the structure of the Committee:



## 4.2 Member Organisations

The list below are the member organisations for the year 2021:

Organisation	Role
<b>Utility Consultancy Partners</b>	Chairperson
<b>NSAI</b>	Secretary
<b>ABB Limited</b>	Committee Member
<b>Analog Devices International</b>	Committee Member
<b>Cork Institute of Technology</b>	Committee Member
<b>Dublin Institute of Technology</b>	Committee Member
<b>Dundalk Institute of Technology</b>	Committee Member
<b>EirGrid</b>	Committee Member
<b>Electric Power Research Institute</b>	Committee Member
<b>ESB</b>	Committee Member
<b>Garrad Hassan Ireland Limited</b>	Committee Member
<b>Glen Dimplex</b>	Committee Member
<b>ioLogic Consulting</b>	Committee Member
<b>NUI Galway</b>	Committee Member
<b>Renewable Power Generation Limited</b>	Committee Member
<b>RPS Group</b>	Committee Member
<b>Sustainable Energy Authority of Ireland</b>	Committee Member
<b>Technical University Dublin</b>	Committee Member
<b>Tomas Blodau Wind Energy Consultancy</b>	Committee Member
<b>University of Limerick</b>	Committee Member

## 5 Summary of 2021 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	10 March 2021	N863
2	15 September 2021	N881

## 5.2 International/Regional

### 5.2.1 Meetings

Committee members attended CENELEC TC 79 meetings as follows:

Committee Name	Location	Date	No. of Attendees
IEC/TC 88/PT 61400-11-2	Virtual	06 January 2021	1
IEC/TC 88/PT 61400-11-2	Virtual	26 January 2021	1
IEC/TC 88/PT 61400-11-2	Virtual	02 February 2021	1
IEC TC57 WG13/WG14	Virtual	02 – 05 February 2021	1
IEC/TC 69/PT 63243	Virtual	07 April 2021	1
IEC/TC 88/PT 61400-11-2	Virtual	08 April 2021	1
IEC/TC 69/PT 63243	Virtual	13 May 2021	1
CLC TC 57	Virtual	20 May 2021	1
IEC TC57 WG13/WG14	Virtual	09 – 11 June 2021	1
IEC/TC 69/PT 63243	Virtual	25 September 2021	1
IEC TC57 WG13/WG14	Virtual	04 – 08 October 2021	1
IEC/TC 69/PT 63243	Virtual	13 October 2021	1
IEC/TC 88/PT 61400-11-2	Virtual	19 October 2021	1
IEC/TC 69/PT 63243	Virtual	04 November 2021	1
CLC TC 8X	Virtual	18 November 2021	1
IEC/TC 69/PT 63243	Virtual	22 November 2021	1
IEC TC 120	Virtual	24-26 November 2021	1
IEC/TC 69/PT 63243	Virtual	03 December 2021	1
IEC/TC 88/PT 61400-11-2	Virtual	06 December 2021	1
IEC TC 120 WG5	Virtual	15 - 17 Nov 2021	1

### 5.2.2 International/Regional Work

Ireland is following and contributing to the development of a number of Standards and Technical Specifications associated with the electrotechnical aspects of Smart and Renewable Energy. Some of the members are participating directly in working groups and project teams within the technical committees.

Members of NSAI/ETC/TC 20 are actively involved in standards development work at International and European level.

### 5.2.3 International/Regional Standards Reviewed

IEC 61400-11-2	Wind energy generation systems - Part 11-2: Measurement of wind turbine noise characteristics in receptor position
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IEC 61968	Application integration at electric utilities - System interfaces for distribution management
IEC 61970	Energy management system application program interface (EMS-API)
IEC 62933	Electrical energy storage(ESS) systems
IEC 63243	Interoperability and safety of dynamic wireless power transfer (WPT) for electric vehicles

## 5.2.4 International/Regional Voting Results

The committee voted on 6 international ballots in 2021.

## 5.3 Regulatory Development/Update

There are no current European Regulations applicable to the suite of Standards being developed.

# 6 Irish Publications/Reviews

## 6.1 Publications

The Committee did not publish any deliverables this year.

## 6.2 Reviews

The Committee did not review any Irish national deliverables.

# 7 Work programme for 2022 onwards

A new area of interest to some of the members of the committee is the standardisation of Distributed Energy Resource Management Systems (DERMS) for the Irish Electricity Industry. This will involve actively managing demand and generation within an overall market framework, to enable distribution renewables, communities and demand response and storage providers to actively participate in the electricity system. Depending on how the international standards evolve this may be included in the remit of the committee for 2022.

The committee will continue to meet bi-annually and keep a close eye on standards developments particularly within IEC TC 120 Electrical Energy Storage (EES) Systems.