

# ANNUAL REPORT 2021

NSAI TECHNICAL COMMITTEES (NSAI/ETC/TC 06 "EQUIPMENT FOR POTENTIALLY EXPLOSIVE ATMOSPHERES")

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# 1 Chairman's Statement

#### Chair of NSAI/ETC/TC06:

The NSAI/ETC/TC 06 committee held four full meetings virtually during 2021. Further remote meetings were held by the NSAI/ETC/TC 06/SC 01 sub-committee for non-electrical equipment in potentially explosive atmospheres together with the various working groups for the "ATEX Delivery Guide" – (Health and Safety Authority.) The members of NSAI/ETC/TC 06/SC 01 sub-committee and the working groups of the "ATEX Delivery Guide" have contributed a great deal of time and effort and are to be congratulated for their achievements to date. In addition, 38 2-hour virtual meetings were attended by NSAI/ETC/TC06 committee members for the IEC /TC 31 SC 31J/MT60079-14, which is due for completion this year.

The primary focus of the committee is on IEC /TC 31 SC 31J/MT60079-14, MT60079-17, MT60079-19 and IEC TC 31/PT 60079-44 with secondary focus on other MTs and PTs, as listed below.

Several Work Groups were formed during 2021 as listed in 5.1 below with other Work Groups envisaged in 2022. The membership of NSAI/ETC/TC06 increased in 2021 and the number of members participating in the work of the committee continues to increase.

None of the NSAI/ETC/TC06 committee's achievements during another difficult 'Covid' year would have been possible without the expert guidance of our secretary Amanda-Jane Gainford who, by her advice and professionalism, has provided the motivation for more accomplishments in 2022.

Michael O'Brien.

#### Chair of NSAI/ETC/TC06/SC01:

2021 has been the first full year for NSAI/ETC/TC 06/SC 01 with it being established only towards the end of 2020 due to an increase in interest from key stakeholders within the sector. With the help of Amanda-Jane Gainford, a diverse group of experts have been put together to provide technical expertise, guidance and feedback for this subcommittee which mirrors that of the very active CEN/TC 305. Our inaugural meeting took place virtually in March with four more meetings occurring during the rest of the year. The primary focus of the committee is on CEN/TC 305 and the six associated Working Groups. We hope during the coming year that we continue to develop as a group and to eventually have in-person meetings when it is safe to do so. Particular recognition must go to Amanda-Jane for her work and effort in activating this sub-committee and overseeing the program of work."

Damien Hennessy

# 2 Introduction

The standardization work of NSAI/ETC/TC 06 supports the ATEX Directive 2014/34/EU concerning equipment and protective systems intended for use in potentially explosive atmospheres and ATEX Directive 1999/92/EC on minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres.

Improved safety in environments where explosive atmospheres may occur is of primary concern but there is also need for uniform operational practices in these areas to promote free trade and economic development.

The apparatus covered by this Technical Committee is used primarily by the oil, gas, chemical, pharmaceutical, food, plastics, grain, mining and coal industries during production, storage, processing, transportation, distribution and use of the products associated with these industries

# 3 Scope of TC

NSAI/ETC/TC6 is responsible for coordinating the development of standards for equipment for use where there is a hazard due to the possible presence of explosive atmospheres of gases, vapors, mists, or combustible dusts. NSAI/ETC/TC 06 members are active participants in the international standards work of IEC TC31 "Equipment for explosive atmospheres", which was established over 60 years ago, and CENELEC TC31. IEC and CENELEC standards cover the life cycle of equipment for use in potentially explosive atmospheres through design, manufacture, installation, maintenance, and repair. The area of potentially explosive atmospheres is subject to two EU Directives.

- Directive 2014/34/EU which covers equipment and protective systems and
- Directive 1999/92/EC which covers the safety and health protection of workers potentially at risk.

The committee mirrors the following international committees:

Committee Name	Committee Title
IEC TC 31	"Equipment for explosive atmospheres",
CLC TC 31	"Electrical apparatus for potentially explosive atmospheres"

In Q1 2021 a sub-committee of NSAI/ETC/TC 06 was formed to look at Potentially explosive atmospheres in the nonelectrical area.

NSAI/ETC/TC 06/SC 01 supports the development of national and international standards in the areas of potentially explosive atmospheres & Mirrors the work of CEN/TC 305.

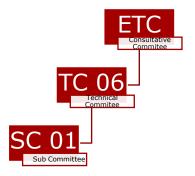
The Sub-committee mirrors the following international committees:

Committee Name	Committee Title
CEN TC 305	Potentially explosive atmospheres - Explosion prevention and protection"

# 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
Aviva Insurance DAC	National committee member
Baker Hughes	National committee member
BMS	National committee member
Consultant	National committee member
DPS	National committee member
Ennis Bros. & AECI	National committee member
FM Approvals	National committee member
Harrington Electrical	National committee member
HSA	National committee member
Independent Specialist	National committee member
Henkel Ireland	National committee member
Johnson & Johnson	National committee member
Jones Engineering	National chairperson
NSAI	National secretary
Pfizer	National committee member
Project Management Group	National committee member
SK biotek Ireland	National committee member
Sulzer	National committee member
Veolia Energy Services.	National committee member
Veritex	National committee member
<b>H&amp;MV</b> Engineering Thermo Fisher Scientific	National committee member
PM Group	National committee member

# 4.2.1 Members NSAI/ETC/TC 06/SC 01

Organisation	Role
BS & B Innovation	National chairperson
BS & B Safety Systems Ltd	National committee member
Consultant	National committee member
ESB	National committee member
ESBI	National committee member
Explosion Hazards	National committee member
FM Approvals	National committee member
Jones Engineering	National committee member
NSAI	National secretary
Veolia Energy Services.	National committee member

# 5 Summary of 2021 Activities

#### 5.1 National

The Committee met four times in 2021 using MS Teams meetings. Overall, the number of members participating in the work of the committee continues to increase.

The subcommittee that was formed to look at an ATEX guide has launched a webpage on the HSA website. <u>ATEX Delivery Guide - Health and Safety Authority (hsa.ie)</u>. The subcommittee met on their own time to develop this work.

The committee agreed to continue this work and several groups were formed.

- Functional Safety Group
- Static Group
- o Earthing Group
- o Instrumentation Group
- o EPD Group
- Inspection & Testing Group
- o S.I. 630:2019 & S.I. 631:2019 Group

Several of the committee members attended WG, PT and MT meetings throughout the year.

The primary focus of the committee is on IEC/TC 31 SC 31J/MT60079-14, MT60079-17 and MT60079-19 with secondary focus on other MTs and PTs.

### 5.1.1 Meetings

Committee members attended the following NSAI national meetings:

Meeting No.	Date	Minutes Reference
1	2021/02/26	<u>N0942</u>
2	2021/05/07	<u>N0950</u>
3	2021/09/24	<u>N0958</u>
4	2021/11/05	<u>N0965</u>

Sub - Committee members attended the following NSAI national meetings:

Meeting No.	Date	Minutes Reference
1	2021/03/02	<u>N0007</u>
2	2021/04/20	<u>N0016</u>
3	2021/06/01	<u>N0023</u>
4	2021/08/10	<u>N0033</u>
5	2021/11/23	<u>N0038</u>

#### 5.1.2 National Work

A Groups formed to generate content for the ATEX Guide met on their own time outside of NSAI. The NSAI dropbox on livelink is being used to coordinate this work.

# 5.2 International/Regional

#### 5.2.1 Meetings

Committee members attended international CENELEC (CLC) and IEC meetings virtually.

Committee Name	Date	Attendees
CLC TC 31 Plenary	2021/11/04	AJG, MC, DF, JW
IEC/TC 31/Plenary	2021/10/06	AJG, MC



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NSAI Annual Repo	11 2021	
IEC TC 31/WG 22	2021/09/29 (7hrs)	NR & MC
1LC 1C 31/WG 22	2021/09/30 (7hrs)	NR & MC
	2021/11/02 (4hrs)	NR; MC
IEC/TC 31/MT 60079-1	2021/11/03 (1.5hrs)	NR
	2021/11/04 (1.5hrs)	NR
IEC/TC 31/MT 60079-46	2021/10/18	NR
IEC/TC 31/PT 60079-44		
IEC/TC 31/SC 31 M/WG 1		
	2021/01/18	MOB, SF, DF
	2021/01/19	MOB, SF, DF
	2021/01/21 (a.m.)	MOB, SF, DF
	2021/01/21 (p.m.)	MOB, SF, DF
	2021/02/15	MOB, SF, DF
	2021/02/16	MOB, SF, DF
	2021/02/17 (a.m.)	MOB, SF, DF
	2021/02/17 (p.m.)	MOB, SF, DF
	2021/03/08	MOB, SF, DF
	2021/03/10	MOB, SF, DF
	2021/03/11 (a.m.)	MOB, SF, DF
	2021/03/11 (p.m.)	MOB, SF, DF
	2021/04/12	MOB, SF, DF
	2021/04/13	MOB, SF, DF
	2021/04/15 (a.m.)	MOB, SF, DF
	2021/04/15 (p.m.)	MOB, SF, DF
IEC/TC 31/SC 31J/MT 60079-14	2021/07/05	MOB, SF, DF
	2021/07/07	MOB, SF, DF
	2021/07/08 (a.m.)	MOB, SF, DF
	2021/07/08 (p.m.)	MOB, SF, DF
	2021/08/09	MOB, SF, DF
	2021/08/10	MOB, SF, DF
	2021/08/11 (a.m.)	MOB, SF, DF
	2021/08/11 (p.m.)	MOB, SF, DF
	2021/09/06	MOB, SF, DF
	2021/09/08	MOB, SF, DF
	2021/09/09 (a.m.)	MOB, SF, DF
	2021/09/09 (p.m.)	MOB, SF, DF
	2021/10/25	MOB, SF, DF
	2021/10/26	MOB, SF, DF
	2021/10/28 (a.m.)	MOB, SF, DF
	2021/10/28 (p.m.)	MOB, SF, DF
	2021/11/15	MOB, SF, DF, AM
	2021/11/17	MOB, SF, DF, AM
	2021/11/18 (a.m.)	MOB, SF, DF, AM
	2021/11/18 (p.m.)	MOB, SF, DF, AM
	2021/12/13	MOB, SF, DF, AM
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	2021/12/15	MOB, SF, DF, AM
	2021/12/16 (a.m.)	MOB, SF, DF, AM
	2021/12/16 (p.m.)	MOB, SF, DF, AM
IEC/TC 31/SC 31M	2021/10/05	MC
	2021/04/27	AM
IEC/TC 31/SC 31M PT 80079-4	2021/04/28	AM
	2021/04/29	AM

Sub Committee members attended international CEN virtually.

Committee Name	Date	Attendees
CEN TC 305 Plenary	2021/09/30	AJG, DH, POS, DB
	2021/01/11	DH
	2021/02/22	DH
CEN TC 305 / WG 6	2021/04/12	DH
CLN 1C 303 / WG 0	2021/05/28	DH
	2021/09/07	DH
	2021/11/12	DH
	2021/03/10	DH, DB
CEN TO 20E / WC 2	2021/03/11	DH, DB
	2021/06/09	DH, DB
CEN TC 305 / WG 3	2021/06/10	DH, DB
	2021/10/20	DH, DB
	2021/10/21	DH, DB

# 5.2.2 International/Regional Work

The committee worked on developing an ATEX Verification Guidance hosted by the HSA for use by people working in Explosive Atmospheres. The website is live but is still under development.

# 5.2.3 International/Regional Standards Reviewed

The committee are very active at IEC level and break the work down into primary and secondary focus. There are members of the committee sitting on the following IEC committees which are both primary & secondary focus of the committee.

This is the primary focus list:

IEC TC 31/PT 60079-44	Explosive atmospheres - Personal Competence	
IEC TC 31 / SC 31 J/MT 60079-14	Maintenance of IEC 60079-14 Ed. 4.0: Explosive atmospheres - Part 14:	
IEC IC 31 / 3C 31 J/WII 60079-14	Electrical installations design, selection and errection	
IEC TC 31 / SC 31 J/MT 60079-17	Maintenance of IEC 60079-17 Ed. 4.0: Explosive atmospheres - Part 17:	
EC 1C 31 / 3C 31 J/WH 600/9-1/	Electrical installations inspection and maintenance	
IEC TC 31 / SC 31 J/MT 60079-19	Maintenance of IEC 60079-19 Ed. 2.0: Explosive atmospheres - Part 19:	
IEC 1C 51 / 3C 51 J/WH 60079-19	Equipment repair, overhaul and reclamation	

### This secondary focus list:

IEC TC 31/WG 42	Safety Devices Related to Explosion Risk	
IEC TC 31/MT 60079-29	Maintenance of IEC 60079-29 series Gas Detectors	
IEC TC 31/MT60079-1	Maintenance of IEC 60079-1 Explosive atmospheres - Part 1: Equipment	
	protection by flameproof enclosures "d"	

IEC TC 31/MT60079-33	Maintenance of IEC 60079-33 Explosive atmospheres - Part 33: Equipment protection by special protection 's'		
IEC TC 31/PT 60079-46	Explosive atmospheres – Equipment assemblies		
IEC TC 31/WG 22	Responsible for MT 60079-0, maintenance of IEV 60050.426 and other		
	specific tasks assigned by TC 31		
IEC TC 31/WG 39	Adverse Service Conditions		
IEC TC 31/WG 47	EPL Gc equipment		
IEC TC 31 / SC 31 G/MT 60079-11	Maintenance of IEC 60079-11 Explosive atmospheres - Part 11: Equipment		
	protection by intrinsic safety "i"		
IEC TC 31 / SC 31 J/MT 60079-10-1	Maintenance of IEC 60079-10-1 Ed. 1.0: Explosive atmospheres - Part 10-1:		
	Classification of areas - Explosive gas atmospheres		
IEC TC 31 / SC 31 M/MT 80079-34	ISO/IEC 80079-34 Ed. 1.0: Explosive atmospheres - Application of quality		
	systems for electrical and non-electrical equipment		
IEC TC 31 / SC 31 M/MT 80079-38	ISO/IEC 80079-38 Explosive Atmospheres - Part 38: Equipment and		
	components in		
IEC TC 31 / SC 31 M/PT 80079-41	Development of ISO/IEC 80079-41/Ed1: Explosive atmospheres - Part 41:		
	Reciprocating internal combustion engines		
IEC TC 31 / SC 31 M/WG 1	Non-electrical equipment		

This is the primary focus list for NSAI/ETC/TC 06/SC 01:

CEN/TC 305	Potentially explosive atmospheres - Explosion prevention and protection
CEN/TC 305/WG 3	Devices and systems for explosion prevention and protection
CEN/TC 305/WG 6	Flame arresters

# 5.2.4 International/Regional Voting Results

The committee have actively voted on 9 documents in 2021 and have submitted 1 sets of comments.

Active votes were broken down into 6 IEC documents & 3 CENELEC documents.

Body	Vote Reference	Comments Submitted	Decision
IEC	31/1562/FDIS	No	Approve
IEC	31/1560/CD	No	Approve
IEC	31/1595/FDIS	No	Approve
IEC	31/1598/Q	Yes	Approve
IEC	31/1577/Q	No	Approve
IEC	31J/312/CDV	No	Approve
CLC	FprEN IEC 60079-26:2020	No	Approve
CLC	FprEN IEC 60079-31:2021	No	Approve
CLC	prEN IEC 60079-17:2021	No	Approve

The sub-committee vote on all documents at CEN level using a default voting strategy.

The committee actively voted on 13 documents in 2021.



# NSAI/ETC/TC 06 "Equipment for Potentially Explosive Atmospheres"

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Ref	Vote Reference	Comments Received	Decision
1	Draft Dec 408/2021 - Activation of preliminary WI 00305151	2	Approved
2	Draft Decision CEN/TC 305 409/2021 - Confirmation of EN 1449	1	Approved
3	Further procedure on EN 50303	2	Approved
4	Draft Decision 410/2021 - Future of EN 15967 after ENQ	2	Approved
5	Draft Decision 413/2021 - Future of EN 17624 after ENQ	1	Approved
6	Draft Decision 411/2021 - Activation of PWI 00305149	1	Approved
7	Draft Decision 412/2021 - Activation PWI 00305149 + subm ENQ	1	Approved
8	FprEN 14373	3	Approved
9	Draft Decision 414/2021 - Adoption of a NWI 14986	1	Approved
10	Draft Decision 415/2021 - Adoption of NWI EN ISO/IEC 80079-4	1	Approved
11	FprEN 15967	0	Closed No Vote
12	prEN 14983	1	Abstention
13	FprEN 17624	2	Approved

# 5.3 Regulatory Development/Update

The committee started a review of the following Statutory Instruments and this work is planned to continue in 2022.

- <u>S.I. No. 630/2019</u> Dangerous Substances (Flammable Liquids and Fuels Retail Stores) Regulations, 2019
- <u>S.I. No. 631/2019</u> Dangerous Substances (Flammable Liquids and Fuels Distribution and Commercial Supply Stores) Regulations, 2019

# 6 Irish Publications/Reviews

#### 6.1 Publications

The Committee did not publish any deliverables this year, but they did launch a webpage on the HSA website. <u>ATEX Delivery Guide - Health and Safety Authority (hsa.ie)</u>.

#### 6.2 Reviews

No reviews were carried out this year.

# 7 Work programme for 2022 onwards

The focus of the committee shall be on contributing to the IEC 60079 series of standards being developed at European and International level by CENELEC and IEC.

The new subcommittee formed in Q1 2021, NSAI/ETC/TC 06/SC 01 will contribute to IEC 80079 series of standards being developed at European and International level by CENELEC and IEC.

The committee shall continue the work on the production of an ATEX Verification Guidance website hosted by the HSA for use by people working in Explosive Atmospheres. The committee have formed several groups to develop this work. The groups identified are listed below:

- Functional Safety Group
- Static Group
- Earthing Group KE & MOB
- Instrumentation Group
- EPD Group
- Inspection & Testing Group
- S.I. 630 2019 & S.I. 631 2019
- Dust

Attendance at relevant MT, WG and PT meetings shall be divided among the TC members depending on availability.

It is planned to have 4 NSAI/ETC/TC 06 meetings in 2022.

# 8 Additional Information

No additional information.