

## Equipment for Potentially Explosive Atmospheres



### Annual Report 2014

#### Introduction

TC6 provides the broad national framework for ensuring that the views of manufacturers and users are taken into account in the drafting of European and international standards for equipment for use in potentially explosive atmospheres.

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

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 standardization work of TC6 supports the [ATEX Directive 94/9/EC](#) 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.

The Committee is also responsible for ETCI Publication [ET 105, National Rules for Electrical Installations in Potentially Explosive Atmospheres](#).

#### International TCs Shadowed by this TC

[IEC TC31](#) Equipment for Explosive Atmospheres

[CLC TC31](#) Electrical Apparatus for Potentially Explosive Atmospheres

# Equipment for Potentially Explosive Atmospheres

## 1. Review of the Year 2014

2014 marked another year of useful activity for TC6.

### **International/European Standards Development:**

The work of IEC TC31 and its SC's has reached a stage of maturity, such that relatively few new standards are being developed and the emphasis is on the maintenance and updating of the existing standards infrastructure. Some IEC TC31 standards are now in their sixth or seven editions. New/revised IEC standards published in 2014 included:

**IEC 60079-1 Ed 7.0** Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

**IEC 60079-2 Ed 6.0** Explosive atmospheres - Part 2: Equipment protection by pressurized enclosure "p"

**IEC 60079-29-3 Ed 1.0** Explosive atmospheres - Part 29-3: Gas detectors - Guidance on functional safety of fixed gas detection systems

The standardization work of CENELEC TC31 is cited in European Directive 94/9/EC (Equipment and protective systems intended for use in potentially explosive atmospheres). The latest list of harmonized European Standards dated 14.03.2014 is hosted on the European Commission [Europa server](#). The Irish Standard (I.S.) implementation of these European Standards is available for purchase and download from [www.standards.ie](http://www.standards.ie).

### **New ATEX Directive:**

The new ATEX Directive 2014/34/EU was published in 2014 and is aligned to the New Legislative Framework (NLF). The NLF is designed to reinforce the application and enforcement of existing internal market legislation by improving market surveillance rules, boosting confidence in the conformity assessment of products, clarifying the meaning of CE marking and establishing a toolbox of measures for future legislation. The new ATEX Directive will be applicable from 20 April 2016.

### **Wiring Rules:**

During the year, further work on the future revision of ET105:2011 was undertaken by TC6. This is a significant project that is being progressed in tandem with the proposed publication of a new document, ET216. Under the TC6 plan, it is intended that ET105 will be streamlined, with informative and explanatory content being relocated from ET105, the Rules proper, into the new ET216, the Guidelines to the Rules. The committee is grateful to the Cork-based Task Group which has taken the lead in this project, under the guidance of Mr. Carroll.

Mr. Moore and Mr. O'Brien presented a paper on the work of ETCI TC6 to the Association for Petroleum and Explosives Administration (Irish Branch) in October 2014.

## 1. TC6 Membership 2014

Mr. N. O'Riordan	<b>CHAIRMAN</b>
Mr. P Henehan	Consultant
Mr. C. Ennis	AECI (outgoing)
Mr. K. Fallon	DPS Engineering and Construction
Mr. N. Ross	GE Sensing
Mr. G. Carroll	RSA Insurance
Mr. M. O'Brien	Hibernian Insurance
Mr. P. Delaney	Health and Safety Authority
Mr. S. Moore	Schering-Plough
Mr. K. Lynch	ESBI Engineering
Mr. B. Curtis	Consultant
Mr. G. Coughlin	Pfizer Ireland
Mr. K. Ennis	AECI (incoming)
Mr. G. Hennessy	Veritex
Mr. B. Abbott	NSAI, <b>Secretary</b>

## 2. International Meetings 2014

Due to resource and funding constraints, TC6 was only able to attend one international (IEC TC31 WG22) meeting during the year. WG 22 is responsible for Maintenance Team MT 60079-0, the maintenance of IEV 60050.426 and other specific tasks assigned by the main TC.

Name	International Committee	Meetings Attended
K. Lynch	IEC TC31 WG22	Germany, March/April 2014
G. Carroll	IEC TC31 WG22	Germany, March/April 2014

## 3. TC's Involvement with Training During 2014

During 2014, ETCI TC6 members worked closely with ETCI Head Office and the ETCI Training Committee in the provision of ATEX Foundation Training Courses on 3/4 March 2014 and 6/7 October 2014 in Cork and 4/5 February 2014 and 9/10 October 2014 in Dublin.

TC6 is, as ever, indebted to all who coordinated planning for these meetings and to the members of the committee who presented technical papers and provided practical assistance to the training programme.

## 4. ETCI Publications Developed by TC6 During 2014

No new TC6 publications were added during the year. ET105 Ed 3.0 continues to enjoy healthy sales since its publication in 2011.

During the year Mr. Lynch and Mr. Moore assisted by their colleagues continued to maintain and enhance the Explosive Atmospheres content, including FAQ's, on the ETCI TC6 web pages.

### Frequently Asked Questions: || [back to top](#)

- Question 1: [What is an "EC Type Examination Certificate"?](#)  
Question 2: [What is 'cold flow' in the context of cables?](#)  
Question 3: [Is the entry thread classed as part of the flame path when a cable gland is fitted to an Exd enclosure?](#)  
Question 4: [Does it breach certification if multiple reducers are used on Exe cable glands into a junction box?](#)  
Question 5: [How should Earth tags be used on/with cable glands/junction boxes in order to ensure correct wiring?](#)  
Question 6: [Can a flameproof cable gland be used in an increased safety installation?](#)  
Question 7: [Can an I.P. washer be fitted with an Exd cable gland?](#)  
Question 8: [What modifications can and can't be carried out on Exd enclosures?](#)  
Question 9: [Why are serrated washers used?](#)  
Question 10: [What are the restrictions on obstructions near flanges of Exd flameproof enclosures?](#)  
Question 11: [What does the 'X' Suffix On an ATEX Certificate number mean?](#)  
Question 12: [What does the 'U' Suffix On an ATEX Certificate number mean?](#)  
Question 13: [What documentation should I receive from a manufacturer/supplier of ATEX equipment?](#)  
Question 14: [What is the stance on Spare Parts and Repair of Equipment under the ATEX Directive?](#)

*TC6 Frequently Asked Questions on ETCI TC6 web page*

## 5. Programme for Coming Year

- Participate in standardization work of IEC TC31 and CENELEC TC31, including, where possible, attendance at international meetings and Maintenance Team (MT) meetings.
- Continue to maintain membership to best reflect the interest of industry and users in Ireland
- Assist ETCI Training Committee in development of training courses.
- Progress revision of ET105 and advance work on proposed ET216.

## 6. ETCI TC6 Meetings 2014

ETCI TC6 held five meetings in 2014, two of which were online meetings. Informal Task Group meetings were also held in Cork during the course of the year.

DATE	VENUE
30 January 2014	Online Meeting
8 May 2014	Cork
10 July 2014	Online Meeting
11 September 2014	ETCI Head Office
9 December 2014	Engineers Ireland



Meeting ETCI TC6, 11 September 2014 (l to r, N O'Riordan, M.O'Brien, G. Coughlan, C. Ennis, K. Lynch, S. Moore, K. Ennis, K. Fallon, N. Ross, P. Delaney)

## 7. Further Information on IEC TC31/CLC TC31

	IEC TC31	CLC TC31
<b>Committee Scope</b>	<a href="#">Link</a>	<a href="#">Link</a>
<b>Publications</b>	<a href="#">Link</a>	<a href="#">Link</a>
<b>Work Programme</b>	<a href="#">Link</a>	<a href="#">Link</a>
<b>Working Documents</b>	<a href="#">Link</a>	<a href="#">Link</a>
<b>Documents for Vote</b>	<a href="#">Link</a>	<a href="#">Link</a>