

# Report from the TC 31 Chairman, Mr. Jim Munro, to the ExMC Meeting in Split, Croatia, September 2011



## Introduction

- ▶ Report covers the activities of IEC Committee TC 31 *Equipment for Explosives Atmospheres* since the last meeting of IECEx Scheme in September 2010

## Introduction

- ▶ It includes some items for which feedback from ExMC is sought due to some major developments in work of TC 31 in the past year.
- ▶ The actions requested of ExMC are highlighted in bold in the section titled ‘Areas Likely to be of Major Interest to IECEx’ in the report.

## Activities during the Past Year

- ▶ Last plenary meeting of TC 31 - 14-15 October 2010 in Seattle, USA. Other meetings of TC 31 were held prior.
- ▶ Some outcomes of the plenary meeting were:
  - ▶ Formation Horizontal Working Group for electrochemical cells and batteries in Ex equipment and proposed liaisons with TC21 (Secondary cells) and TC35 (Primary cells).

## Activities during the Past Year

- ▶ **Outcomes from plenary (continued)**
  - ▶ Limiting scope of 1st edition of IEC 60079-33 to electrical equipment only. Will review this decision for 2nd edition with view to merging approaches in IEC 60079-33 and ISO/IEC 80079-36.
  - ▶ For Type of Protection “p” 3 Levels of Protection will be “pxb”, “pyb”, and “pzc”.

## Activities during the Past Year

- ▶ **Outcomes from plenary (continued)**
  - ▶ Request to SMB to include more information on changes in standards from one edition to the next.
  - ▶ AHG34: Low temperatures - agreed to continue work and report to next meeting

## Activities during the Past Year

- ▶ Meeting TC 31 Chairman's Advisory Group - Kista Sweden, on 7 to 8 April 2011. Other TC 31 meetings at the same location prior to the CAG and also meeting of IECEx 03 ExMC WG10
- ▶ Some outcomes from the CAG meeting were:
  - ▶ Support for IECEx Decision Sheet to address the use of the 60079-15, Ed. 4, requirements for rotor air gap spacing to assessments against 60079-15, Ed. 3.

## Activities during the Past Year

- ▶ **CAG outcomes continued:**
  - ▶ Task Group established to consider the development of requirements for identification of the technical significance of changes to TC31 Standards.
  - ▶ Request to Convenor MT60079-15 prepare proposal for possible relocation of remaining concepts within the existing IEC 60079-15 to the standards for other types of protection.



## Activities during the Past Year

- ▶ **CAG outcomes continued:**
  - ▶ Supported development by MT60079-28 on optical radiation of an I-SH (interpretation sheet) to IEC 60079-28 to clarify the scope of application of the standard eg not luminaires).
  - ▶ Supported concept of redline standards where appropriate
  - ▶ Supported establishment of a liaison with TC 2 Rotating machinery

## Future TC 31 Meetings

- ▶ Next plenary meeting of TC 31 is scheduled for 28-29 October 2011 in Melbourne, Australia
- ▶ Next meeting of CAG will take place on 29-30 April 2011 in Northbrook, USA.

## Standards and Associated Documents Issued Recently

- ▶ The report shows standards and associated documents that have been published over the past 12 months to mid July 2011 – see next slide

Number	Edition	Date	Title
IEC 60079-0 Also available in redline version	Ed 6	2011-6	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-11 Now also available in redline version	Ed 6	2011-6	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
ISO/IEC 80079-34	Ed 1	2011-4	Explosive atmospheres - Part 34: Application of quality systems for equipment manufacture
IEC 60079-35-1 Superseding IEC 62013-1 Ed2	Ed 1	2011-5	Explosive atmospheres - Part 35-1: Caplights for use in mines susceptible to firedamp - General requirements - Construction and testing in relation to the risk of explosion
IEC 60079-0	Ed 5 Corr 1	2010-12	Explosive atmospheres – Part 0: Equipment – General requirements
IEC 60079-19	3	2010-11	Explosive atmospheres - Part 19: Equipment repair, overhaul and reclamation
IEC 60079-13	1	2010-10	Explosive atmospheres - Part 13: Equipment - protected by pressurized rooms "p"
IEC 60079-29-4	Ed 1 Corr 1	2010-8	Explosive atmospheres - Part 29-4: Gas Detectors - Performance requirements of open path detectors for flammable gases

# Documents nearing completion

Document Number	Date	Title
31/929/CDV	2011-4-22	IEC 60079-1 Ed. 7.0: Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures
31/927/CDV	2011-04-15	IEC 60079-33 Ed. 1.0: Explosive atmospheres - Part 33: Equipment protection by special protection 's'

## Matters Likely to be of Major Interest to IECEx

- ▶ The following areas are likely to be of particular interest to IECEx and in some cases TC 31 is seeking specific action or feedback from IECEx.
  - ▶ Publication of ISO/IEC 80079-34: Explosive atmospheres - Application of quality systems for electrical and non-electrical equipment:

## Matters Likely to be of Major Interest to IECEx (continued)

- ▶ **Methods of highlighting changes in standards:**
  - ▶ **Redline standards - support is sought from the members of IECEx and the ExMC for this option to continue to be made available. [See example](#)**
  - ▶ CAG task group to consider the development of TC 31 requirements for the identification of the technical significance of changes to TC31 Standards

## Matters Likely to be of Major Interest to IECEx (continued)

- ▶ **Methods of highlighting changes in standards:**
  - ▶ CAG task group to consider the development of TC 31 requirements for the identification of the technical significance of changes to TC31 [Standards](#) - **Any feedback on the approach from ExMC members would be welcome**



## Matters Likely to be of Major Interest to IECEx (continued)

- ▶ The progress in developing non-electrical standards:
  - ▶ There is now good progress being made in development of non-electrical dual badged standards by SC 31M, *Non-electrical equipment and protective systems for explosive atmospheres*, as follows:

## Matters Likely to be of Major Interest to IECEx (continued)

- ▶ ISO 80079-36: Explosive atmospheres - Non-electrical equipment for use in explosive atmospheres - Basic methods and requirements – 3rd CD was issued 1 July 2011.
- ▶ ISO 80079-37: Explosive atmospheres - Non-electrical equipment for use in explosive atmospheres - Non-electrical type of protection constructional safety 'c', control of ignition sources 'b', liquid immersion 'k' – 2<sup>nd</sup> CD was 24 June

## Matters Likely to be of Major Interest to IECEx (continued)

- ▶ ISO 80079-38: Explosive atmospheres - Non-electrical equipment for use in explosive atmospheres - Part 38: Equipment and components in explosive atmospheres in underground mines – 1st CD issued 4 February 2011.
- ▶ The above standards should be published in 2013 or 2014.

## Matters Likely to be of Major Interest to IECEx (continued)

- ▶ **It is recommended that ExMC consider the implications of the availability of such standards to be added to the scopes of ExCBs and ExTLs operating in the IECEx Equipment Certification Scheme.**

## Summary of items needing feedback

- 1. Redline standards**
- 2. Proposed method of highlighting changes in standards**
- 3. Implications for IECEx of the new non-electrical standards**

# TC 31/IECEX – hand in hand



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