

# Joining forces in the Ex sector

IECEX and UNECE present joint paper at PCIC Europe

**IECEX, the IEC System for Certification to Standards Relating to Equipment for Use in Explosive Atmospheres, and UNECE, the United Nations Economic Commission, were invited to present a joint paper at the 2012 PCIC (Petroleum and Chemical Industry Committee) Europe Conference, which takes place in Prague, Czech Republic, on 19-21 June.**

Co-authored by Chris Agius, IECEX Executive Secretary, and Lorenza Jachia, Head of Unit, Regulatory Cooperation, UNECE, the paper, entitled *IECEX System – Evolution and role of the United Nations, UNECE*, provides an in-depth analysis of the IECEX System and the rationale behind its endorsement by the United Nations, via UNECE, as the internationally recognized certification system for promoting the safety of equipment, services and personnel associated with explosive areas.



UNECE published *A Common Regulatory Framework for Equipment Used in Environments with an Explosive Atmosphere* in early 2011

## High-risk environment

The Ex sector encompasses more than just the most obvious oil and gas or petrochemical industries. The risk of fire or explosion exists in a variety of sectors, such as transportation – including aerospace – furniture manufacturing, automotive manufacturing and repair, pharmaceuticals, food processing, grain

handling and storage, sugar refineries and coal mining. They all utilize flammable substances in quantities that may result in concentrations that are potentially explosive, whether that is during normal operation or due to abnormal situations arising, or is on a constant basis.

## Safety is a must

In its 16 years of existence, IECEX has set out to prove that safety in these high-risk areas is an attainable goal, providing that this priority is shared by all stakeholders involved. For this to happen, industry needs to allocate adequate resources and policymakers should act cohesively and decisively at local, regional national and global levels.

One of the most important roles of the United Nations is to protect workers, consumers and, more broadly, all human beings and forms of life from hazards, as well as to promote development that is in keeping with the needs of present and future generations.

## Joining forces towards a common goal

In joining forces with the United Nations, through UNECE, the IEC and IECEX aim to act as catalysts for a broad and global coalition that will provide and ensure safety for all industries worldwide where flammable or combustible materials are used, stored or transported, and where the risk of fire and explosion always lurks.

The joint paper describes the respective roles of the two organizations and the mechanisms that brought them together in their endeavour to make the world a safer place for all.

## A joint approach

The approach jointly proposed by IECEX and UNECE, in partnership with industry and policymakers, embraces the work of



Offshore platforms are among the world's most risky environments

the standardization community and of the IECEx System. The adoption of a shared regulatory framework at a global level in this sector aims to provide:

- increased safety for workers, communities living in the vicinity of plants and the natural environment
- lower costs for international trade
- more opportunities for producers from countries with economies in transition and developing countries
- greater confidence for end users

To attain these objectives, the shared regulatory framework needs to include the following elements:

- a detailed description of essential requirements for producers of equipment used in environments with an explosive atmosphere, as well as for owners and operators of plants in which it is used
- a precise reference to the international standards in which these requirements are set out
- how compliance with these standards should be assessed, if relevant, prior to the placing of the equipment on the market
- how continued surveillance of the equipment, as well as of the plants and facilities where it is used, should be ensured

### Common regulatory framework

These elements form the cornerstone of regulatory cooperation within the framework of the United Nations.



*The risk of explosion exists in grain handling and storage facilities*

IECEX and UNECE have worked in close cooperation for several years to develop a model for legislation in the Ex sector. Originally a German initiative, the model was adopted in November 2010, and in early 2011, the UNECE issued a publication, *A Common Regulatory Framework for Equipment Used in Environments with an Explosive Atmosphere*, in which this model is outlined.

Any Member State that has no regulatory framework in the explosive equipment sector can use the model as a blueprint for legislation. If countries already have such a framework, they can consider gradually converging towards this international model. Once the model has been adopted as national legislation, it

will enable the sector to operate under a single common regulatory framework in all participating countries.

### Raising awareness in developing countries

The current focus of cooperation between IECEx and UNECE is the promotion of the common regulatory framework and objectives, primarily among developing countries, but also, at a later stage, among developed countries.

The first promotional event was the 2012 IECEx International Conference in Dubai, jointly organized by IECEx, UNECE and ESMA (Emirates Authority for Standardization and Metrology) (See article in the May issue of *e-tech*).

## About PCIC Europe

PCIC Europe is the European forum for exchanging experience about the practical applications of electrical and instrumentation technology in the petroleum (oil and gas), chemical and pharmaceutical industries. Experts from users, engineering companies, manufacturers, regulators, certifying

bodies and international standardization organizations present papers at PCIC Europe conferences with the aim of informing attendees about their experience and recent progress. PCIC Europe is part of PCIC, an affiliation of IEEE (Institute of Electrical and Electronics Engineers) in the USA.