

Successful beyond expectations

Dubai 2012 Conference marks launch of IECEX in the Gulf

The 2012 'IECEX International Conference: Equipment and Services in Explosive Atmospheres' was held in Dubai, UAE (United Arab Emirates) on 20-21 March, marking the launch of the IECEX in the Gulf. The conference was organized by ESMA (Emirates Authority for Standardization and Metrology) in collaboration with IECEX and UNECE (United Nations Economic Commission for Europe).

This [original article](#) was published in *Hazardous Area International*, a media sponsor of the Dubai conference.



Unify practices and standardization in the UAE Ex sector

In a keynote speech, Mohammed Saleh Badri, Director General of [ESMA](#), revealed that a pan-UAE committee will be established, over the next few months, to unify practices and standardization of equipment and services in the explosive atmospheres sector. The committee will propose the adoption of IEC International Standards for equipment in explosive atmospheres, with 2014 set as the introduction date across the United Arab Emirates for ESMA to start issuing [IECEX](#) certificates. IEC and IECEX, the IEC System for Certification to Standards Relating to Equipment for Use in Explosive Atmospheres, have been endorsed by the UN (United Nations) through [UNECE](#).

Establish a culture of safety and performance

"The next step is to promote awareness about the role and importance of standardization bodies across the oil and gas sector, including companies such as [ADNOC](#) (Abu Dhabi National Oil Company), [ENOC](#) (Emirates National Oil Company) and [Emarat](#), to ensure compliance with international standards and protect facilities from hazards and prevent accidents and disasters," Badri said.

"Good and proper products, safe work environments and qualified staff are the key themes that must be given a top priority," he noted.

Badri said the conference was in line with UAE Government guidelines and UAE Vision 2021, which aims to make the Emirates a leading global presence by 2021, as well as implementing the government's strategy to ensure maximum security and safety for all members of the public. "Our aim is to achieve our government's strategic objective of providing safety and a healthy environment, and fully protecting customers by ensuring the compliance of services and products with international quality and Ex standards", he added.

Badri said that the sector needed to establish a culture of safety and performance in the high hazard sector, encouraging the exchange of information and expertise, raising the efficiency and safety of products, as well as learning best practices from conformity assessment systems.

About the conference

The conference discussed a host of topics and issues pertaining to the Ex field, such as plant design, principles and practical applications of area classification, installation and repair, and compliance and implementation of IEC International Standards. Other papers covered inspection, repair and overhaul of Ex equipment and systems, personnel competence, as well as requirements and regulations within the [GCC](#) (Gulf Cooperation Council).

The two-day event offered a unique opportunity for companies and individuals in the region not only to get better acquainted with IECEX and international best practice, but also to network with the community of Ex experts present at the conference.

The conference brought together 200 experts from 28 Arab, European, Asian and African countries, including Saudi Arabia, Kuwait, Britain, Germany, Russia, Australia, the USA, France, Japan, India, Pakistan, Cameroon, Canada and Nigeria, in addition to the UAE.

About HazardEx

[HazardEx](#) is the brand name for a suite of products – website, journal, newsletter, annual event – dedicated to the provision of up-to-date information specifically relevant to those companies and individuals responsible or interested in safe working operations within hazardous area environments.

Hazardous Area International magazine
HazardEx Group of media products. It offers editorial opinions and case studies specifically for the hazardous area market.

Find out more

IECEX
IEC System for Certification for Standards relating to Equipment for Use in Explosive Atmospheres

ESMA
Emirates Standardization and Metrology Authority

UNECE
United Nations Economic Commission for Europe

IEC TC 31
Equipment for explosive atmospheres

Implementing IECEx in the UAE

In an interview with Hazardous Area International after his speech, Badri expanded on his plans for IECEx within the UAE and the Gulf.

"Many of our important stakeholders are present at the conference, and the next step will be a further round of meetings, and then to gather the key stakeholders in the next six months to form a committee and establish a system that is acceptable to all.

"Our committee will represent all parts of the oil and gas industry, other high hazard industries, the different UAE states' regulatory bodies and governments, manufacturers and customers to look at how best we can harmonize standards and provide a solution so that we can move forward quickly.

"The 2014 timeline is very short, but that shouldn't be a problem. This is a small country and in the last two years the Government of the UAE has been very keen to have an integrated system with buy-in from all the different stakeholders."

Badri thinks the only likely problem will be full implementation.

"We can say we want the structure in place by 2014 to start off the process, but what about ensuring full compliance across manufacturers and industries? We need to agree on a date for that also, and that will depend on the situation amongst the companies and organizations concerned.

Why IECEx?

"We have to make sure that we have enough awareness within the country to make the people and systems comply fully with safety requirements. But as they say in America, you can only eat an elephant one bite at a time! The first step will be to carry out risk assessments, and initially concentrate on those areas of high and medium risk.

"We chose IECEx because we didn't want to reinvent the wheel. Starting our own system from scratch would have taken a lot of time, so we went out to see what systems were in place internationally, which were the benchmarks, and looked at those that could best be applied to our situation here in the UAE.

"IECEx is UN-approved and accepted worldwide, so we thought, as a first benchmark, let's go down this road, go to the companies involved and see if it is applicable within the UAE. IECEx may not be applicable at the end, but we have to start somewhere.

Successful implementation of IECEE

"We have already been through this process with IECEE, the IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components, which we introduced for household appliances after a spate of water-heater explosions. This was quickly accepted and implemented, and the results have been very positive – no more explosions!

"In two years we switched from a situation where we had domestic explosions to one where, with IECEE certification, UAE manufacturers are not just providing safer products to the local market, but are using their certificates to sell around the world because the standard is approved and recognized.

"That is why we became interested in IECEx, because we can convince our companies it is internationally recognized, approved by the UN, and we will quickly reach a level that is acceptable internationally."

UN partnership with IECEx

Lorenza Jachia, Secretary, Working Party on Regulatory Cooperation and Standardization Policies and Head, Regulatory Cooperation Unit, UNECE, explained why the UN is partnering with [IEC TC \(Technical Committee\) 31: Equipment for explosive atmospheres](#), and IECEx.

"UNECE, a centre of excellence for work in this area within the UN, conducted a study comparing regulations in force in global markets and concluded that most national and regional regulations already broadly use the technical requirements contained in the international standards drawn up by IEC TC 31.

"Countries use these standards in their regulations in different ways, including: by making the standards mandatory through a legislative act; and by making compliance with the standards a means of proving compliance with the essential health and safety requirements laid out in the legislation.

Common regulatory framework

"However, laws and regulations still diverge. In addition, many regulatory environments emphasize the mandatory approval by domestically recognized notified bodies of all imported equipment. This makes it difficult to open markets for explosion-protected equipment and services, which is against the interests of both industry and consumers. Indeed, repeated testing does not necessarily lead to additional safety, but it certainly does lead to additional costs.

"To overcome these barriers, UNECE proposes that countries adopt a regulatory model that encompasses IEC TC 31 International Standards and the IECEx System, by making both a part of their legislative frameworks. Within these frameworks, the IECEx System is an acceptable means of establishing conformity to standards that are commonly agreed.

"And UNECE encourages countries that do not accept IECEx certificates to base national certification of compliance on IECEx testing and assessments.

"The aim of both the IEC and the United Nations is to promote the adoption of an effective, common regulatory framework by as many countries as possible. By doing so, trade costs will be reduced and safety enhanced in all industries worldwide where there is a risk of fire or explosion.

"This action will contribute to one of the UN's most important goals: protecting workers, consumers, and more broadly all forms of life, from hazard," Jachia concluded.

The first of its kind

Chris Agius, IECEx Executive Secretary, said the Dubai IECEx Conference was the first international conference of its kind jointly hosted by IECEx and the United Nations, through UNECE, alongside co-host ESMA.

"The purpose of the event was twofold: to bring together world experts in the many critical areas that deal with Ex Equipment, installation, servicing and competence of personnel; and to introduce the Gulf Region to the increasingly successful international schemes run by IECEx," he said.

"These are the IECEx Certified Equipment Scheme, the IECEx Certified Services Scheme and the IECEx Certified Persons Scheme (Certificate of Personal Competence, CoPC).

"Presenters from a wide range of interests included [ADCO](#) (Abu Dhabi Company for Onshore Oil Operations), [Total](#), UNECE, ESMA and IECEx, alongside experts from manufacturing, repair, overhaul, inspection, installation and certification. Conference sponsors included [HazardEx](#), [Hazardous Area International](#), [Thuba](#), [SIRA](#), [Presafe](#), [Fluke](#), [Stahl](#), [Endress & Hauser](#) and [SGS Baseefa](#)."

Three core areas covered

The Conference covered three core areas, according to Agius. These were:

- Practical knowledge and information required by those involved in Ex installations from Area Classification to installation, inspection, repair and overhaul, and covering the overall subject of Competence of Persons involved in all these critical areas.
- An introduction into how the IECEx Schemes operate and how they may be used by industry, with a live demonstration of the unique On-Line Certificate system with all certificates issued by all IECEx-approved Certification Bodies being located in one location. "If the certificate does not appear on the IECEx website, then it or the person is not IECEx certified," is a fundamental tenet of the system.
- An explanation of the reason why the United Nations, through UNECE, has formally endorsed the use of IEC TC 31 Standards supported by IECEx Certification as the world's best practice, the recommendation that IECEx be used as a platform for government regulations, and how the UAE is starting down this path.

Successful beyond expectations

Agius says the conference did more than achieve its goals.

"It actually surpassed expectations in terms both of the numbers of attendees and the level of questions and interaction during the Open Forum session, which resulted in the conference closing two hours later than planned. Also, feedback from delegates was very positive.

"I would like to express my sincere appreciation to the presenters, panelists and organizations who all donated their own time and resources to attend. For the future, I am in discussion with key players in the region to organize further information sessions and events," he concluded.