



## CONFORMITY ASSESSMENT

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# Peter Harley on IECEx and global certification

*Based on an abridged version of Peter Harley's keynote speech at the IALI conference*

Peter Harley was Director of [TestSafe Australia](#), situated at Londonderry NSW, Australia, until April 2008. He spoke at the International Association of Labour Inspection (IALI) conference in Adelaide, SA, Australia, in March 2008. The topic of his keynote address was: *Testing and certification goes global - the role and growth of international testing and certification schemes*. He focused on the equipment used in hazardous environments and on [IECEx](#), the IEC's global certification scheme that covers equipment and services for use in explosive atmospheres.

Harley first remarked that major fatal accidents are still occurring in such hazardous production situations as underground coal mining, steel making and petrochemical processing. In the last year alone, major episodes resulting in significant loss of life have occurred in various countries. In many instances these accidents resulted from fire or explosion initially generated from such ignition sources as plant and equipment. Upon investigation these sources were invariably found to be unprotected against explosion.

He then pointed out that countries are increasingly adopting international safety and conformity standards, which require that plant and equipment destined for use in potentially hazardous locations be tested and certified by acceptable testing authorities. Europe, Russia, the United States, Australia, New Zealand and countries within Southeast Asia now require appropriate certification; otherwise, they will not permit equipment to enter or be installed.



Peter Harley has been advocating IECEx certification for many years

## Certification goes global

Said Harley: "The growing emergence of a single global certification scheme for equipment used in hazardous environments such as oil refineries, grain storages and underground coal mines is also great news for world-wide manufacturers of electrical equipment destined for those industries. In the past they have had to work their way through a convoluted maze of country-by-country requirements in order to get essential electrically powered equipment installed into the hazardous areas of their workplaces."

As an important example of global testing and Certification, Harley cited the IEC, which has developed a single global Certification Scheme covering Electrical equipment for use in explosive atmospheres (commonly known as Ex equipment). For Harley, the IECEx Scheme covers a global area of nearly all major industrial countries and involves a relatively straightforward process, which includes the issuing of a Test Report and a Quality Assessment Report (by an acceptable testing and certification body which is designed to assess and audit a manufacturer's quality system). Ongoing surveillance of the production process is also an essential component of the Scheme and ensures that the equipment being produced complies with internationally-recognized explosion protection standards.

Harley went on to explain: "With the globalization of manufacturing and the need to meet stringent safety requirements (particularly for entry into EU, USA, Australia, South Africa and Southeast Asia ) the advent of the IECEx Scheme has now enabled products with IECEx Certificates of Conformity that are manufactured in a particular country to be readily sold and delivered to clients in another country. This can now be done without the costly and time-consuming requirement of re-testing and re-certification of the product."

An important feature of this IECEX Certification Scheme is that it already requires that manufacturers subject their production process to regular audit by the Test House that provided the original certificate. In 2007, certification for repair and overhaul workshops was added to the Scheme, meaning that the full life cycle of the equipment is now under scrutiny.

To conclude, Harley said that "it is essential that employers and workers have a high level of confidence in the safety of the equipment with which they are interacting, particularly in work environments where their life depends upon it."

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### **Peter Harley**

As Director of TestSafe Australia, Harley oversaw the management of two of Australia's pre-eminent occupational health and safety testing facilities (Thornleigh and Londonderry). He was passionately committed to both facilities being recognized as world-class for the full range of services they provide to New South Wales and internationally.

### **About TestSafe Australia**

TestSafe Australia is an internationally recognised testing, certification, research and investigation facility. It is the largest of its kind in the Southern Hemisphere and is one of a small number of such facilities worldwide offering benchmarked testing and certification services to a wide range of industries.

TestSafe Australia is one of IECEX's founding and most active certification bodies and one of its strongest supporters. While accredited as a Testing and Certification Body within Australia, it is also a prominent member of a network of certification bodies worldwide that have been approved to operate the Scheme. Currently it is the fourth largest certifier globally of Ex equipment.

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## **RELATED INFORMATION**

### **IEC links**

[IECEX](#)  
System for certification to standards for equipment for explosive atmospheres

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### **External links**

[TestSafe Australia](#)

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[IALI](#)  
International Association of Labour Inspection

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