

UNECE endorses IECEx

The [UN](#) (United Nations) through its [UNECE](#) (United Nations Economic Commission for Europe) has formally endorsed the use of [IECEx](#), the IEC System for Certification to Standards Relating to Equipment for Use in Explosive Atmospheres.

As an internationally recognized certification system, IECEx promotes safety of equipment and services in explosive areas. It verifies compliance with IEC International Safety Standards in Ex (explosive) areas and covers equipment, systems, services and competency of personnel in the highly specialized industries where the risk of fire and explosions exist (Ex industries).

During its annual session on 24-26 November 2009, the UNECE formally approved the new UN CRO (Common Regulatory Objectives) associated with the [SIEEE](#) (Sectoral Initiative on Equipment for Explosive Environments). The initiative endorses the use of an internationally recognized certification system, IECEx, to promote the safety of equipment, services and personnel associated with explosive areas.

The UNECE model

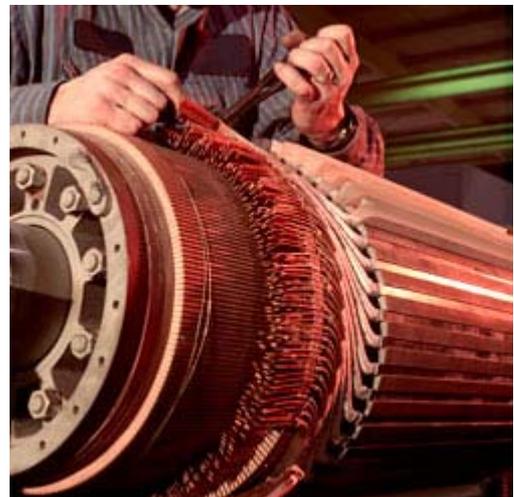
The UNECE CRO model is open to all UN Member States. Countries that have no “normative framework” in place covering the Ex Sector (equipment and services for use in potentially explosive environments) can use the CRO as a blueprint for legislation. If countries already have such a framework, they could consider aligning or converging with this international model. Benefits of national alignment with the CRO model includes a greater level of industry and government confidence in compliance of Ex-related equipment and services with internationally accepted best practice standards such as the IEC 60079 series.

In its own right, the IECEx System provides an internationally accepted mechanism to prevent and eliminate wasteful duplication of testing and assessment. National adoption of the CRO model takes the gains made by IECEx even further in support of the principle aim of one Standard, one Certificate and one Mark accepted worldwide. The result is significant savings in both costs to operators and reduced time to market for Ex equipment and services

The CRO model covers a large spectrum of products and services. Indeed, every product to be used in such an environment may need to be certified as complying with safety standards, depending on the regulations in force. These products may be very simple – e.g. light switches or helmets equipped with luminaires (caplights) – or very complex – e.g. telephones, instrumentation measurement systems or excavators through to large scale items such as rotating machines.



There are risks of explosion in many specialized industries



Motors offer a potentially explosive environment

The CRO model has a “whole life cycle” approach; it includes installation, production, verification, inspection, maintenance and repair, as well as market surveillance. It also includes procedures for assessing and certifying the competency of personnel.

The UNECE CRO model encompasses the IECEx System and makes it part of a legislative framework. Within this framework, the IECEx System is an acceptable means of establishing conformity to internationally accepted safety standards that are commonly agreed. UNECE encourages countries that do not yet accept IECEx Certificates to base national certification of compliance on IECEx testing and assessment.

Better protection through IECEx

The use of an internationally recognized certification system such as IECEx is essential to reduce unnecessary costs associated with duplication of testing and assessment. It also forms a clear basis for sound risk management.

The IECEx System comprises three core certification schemes and a Conformity Mark:

■ IECEx Certified Equipment Scheme

Provides the assurance that products listed on an IECEx CoC (Certificate of Conformity) conform to the international standards that are listed on the IECEx Certificate.

■ IECEx Certified Service Facilities Scheme

Assesses and certifies that organizations and workshops that provide repair and overhaul services to the Ex industry do so respecting the requirements of IEC International Standard 60079-19, *Explosive atmospheres - Part 19: Equipment repair, overhaul and reclamation*.

■ IECEx Certification of Personnel Competencies Scheme

Provides companies with independent proof that a person holding an IECEx CoPC (Certificate of Personnel Competency) has the qualifications, experience and competency necessary to implement the international Ex standards.

■ IECEx Conformity Mark Licensing System

Provides immediate evidence that products bearing this Conformity Mark are covered by an IECEx Certificate of Conformity.

The IECEx On-Line Certificate System

IECEx Certificates issued under all of the IECEx Certification Schemes are done so by ExCBs (Certification Bodies) and ExTLs (Test Laboratories) that have been carefully scrutinized under the IECEx assessment and surveillance process incorporating a site assessment by an independent IECEx assessment team. All issued IECEx Certificates of Conformity can be seen, freely by the public, via the IECEx On-Line Certificate of Conformity System located on the official IECEx website, providing industry with instant verification of any claims of IECEx Certification.

The IECEx Certification Schemes provide independent assurance that equipment and services comply with IEC International Safety Standards and that persons holding an IECEx Certificate of Personnel Competency are competent to work in areas where a concentration of dust, vapour or flammable liquids has the potential to cause explosions.

IECEx Chairman Kerry McManama commented: "The global Ex industry should be proud of the IECEx System and its Certification Schemes which represent the best practice model for assessing and certifying products, services and persons in this highly specialized field of Ex. The recent formal United Nations endorsement justifies the immense amount of work undertaken by all IECEx experts over the past 10-plus years to make IECEx the success story it is today."



Countries that have no “normative framework” in place to cover the Ex Sector can use the CRO as a blueprint for legislation

RELATED INFORMATION

IEC links

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

External links

[SIEEE](#)
Sectoral Initiative on Equipment for Explosive
Environments

[UN](#)
United Nations

[UNECE:](#)
United Nations Economic Commission for Europe

