



## IECEX PUBLICATION

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

---

**IECEX System Business Plan 2010-2014  
Edition 1.0**





## **THIS PUBLICATION IS COPYRIGHT PROTECTED**

**Copyright © 2011 IEC, Geneva, Switzerland**

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester.

If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland  
Email: [inmail@iec.ch](mailto:inmail@iec.ch)  
Web: [www.iec.ch](http://www.iec.ch)

### **About the IEC**

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

### **About IEC publications**

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigenda or an amendment might have been published.

- Catalogue of IEC publications: [www.iec.ch/searchpub](http://www.iec.ch/searchpub)

The IEC on-line Catalogue enables you to search by a variety of criteria (reference number, text, technical committee,...). It also gives information on projects, withdrawn and replaced publications.

- IEC Just Published: [www.iec.ch/online\\_news/justpub](http://www.iec.ch/online_news/justpub)

Stay up to date on all new IEC publications. Just Published details twice a month all new publications released. Available on-line and also by email.

- Electropedia: [www.electropedia.org](http://www.electropedia.org)

The world's leading online dictionary of electronic and electrical terms containing more than 20 000 terms and definitions in English and French, with equivalent terms in additional languages. Also known as the International Electrotechnical Vocabulary online.

- Customer Service Centre: [www.iec.ch/webstore/custserv](http://www.iec.ch/webstore/custserv)

If you wish to give us your feedback on this publication or need further assistance, please visit the Customer Service Centre FAQ or contact us:

Email: [csc@iec.ch](mailto:csc@iec.ch)

Tel.: +41 22 919 02 11

Fax: +41 22 919 03 00



## IECEx PUBLICATION

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

---

**IECEx System Business Plan 2010-2014  
Edition 1.0**

## **1. Introduction**

International standardization and common conformity assessment are important to trade and commerce. In the area of equipment for use in potentially explosive atmospheres, world wide standardization of technical requirements is achieved through IEC standards, in particular the 60079 and 80079 series of standards. However, the application and interpretation of these Standards has a large bearing on whether or not true Standardization is achieved in the practical sense.

In many cases, Conformity assessment against the IEC 60079 series of standards (or equivalent national standards) is currently done on a country by country basis with a significant move towards the use of the IEC Ex system. Standardization, Conformity assessment and associated certification gives users of such equipment and installations a high degree of confidence that the risks of an explosion from an electrical ignition source are appropriately managed.

Countries that participate in the IEC Ex System agree on the need for a forum to:

1. Provide a high degree of confidence in the safety aspects of electrical equipment and installations in potentially explosive atmospheres
2. Improve the quality and capacity of conformity assessment and associated certification in Global economies
3. Support a life-cycle approach that provides fit for purpose equipment and installations and competency for people to manage risks in potentially explosive atmospheres.
4. Support free trade Globally while preserving safety
5. Support improvement of economic efficiency and development through the promotion of standardization and certification activities
6. Interact with other bodies that represent elements of the standardization technical infrastructure, also with industry, consumers and government, IEC Ex System does strive to ensure that individuals who have the ability/authority to get things done in their country are the ones participating in the IEC Ex System

## **2. Industry Overview**

### ***What is an Ex area?***

Ex areas can be known by different names such as “Hazardous Locations”, “Hazardous Areas” “Explosive Atmospheres”, and the like and relate to areas where flammable liquids, vapours, gases or combustible dusts are likely to occur in quantities sufficient to cause a fire or explosion.

The modern day automation of industry has meant an increased need to use equipment in Ex areas. Such equipment is termed “Ex equipment”.

### ***Where do you commonly find Ex equipment?***

Ex equipment areas include:

- Automotive refuelling stations or petrol stations
- Oil refineries, rigs and processing plants
- Chemical processing plants
- Printing industries, paper and textiles
- Hospital operating theatres
- Aircraft refuelling and hangars
- Surface coating industries
- Underground coal mines

- Sewerage treatment plants
- Gas pipelines and distribution centres
- Grain handling and storage
- Woodworking areas
- Sugar refineries
- Metal surface grinding, especially aluminium dusts and particles

### **History-**

IECEX origins date back to the first meeting of its managing committee in London 1996 where it was agreed to take the concept of a single international Scheme dedicated to the various Ex fields and work to make this a reality.

In its early phase the IECEX System operated only one Certification Scheme, covering electrical equipment and did by way of mutual recognition of test and assessment reports, known then as ATRs.

In 2002, the IECEX Management Committee made perhaps its most important decision, to introduce an IECEX Certificate based on an ISO System No 5 Scheme, via the IECEX 'On-Line' website based system.

This saw the first IECEX Certificates being issued in 2003.

From there IECEX has expanded to cover all equipment (not just electrical) plus the introduction of three new schemes and systems to now provide the global Ex community with the following Conformity Assessment services:

- **IECEX Certified Equipment Scheme**
- **IECEX Certified Service Facility Scheme**
- **IECEX Conformity Mark License System**
- **IECEX Scheme for Certification of Personnel Competence**

While IECEX enjoys annual and sustained growth the most impressive aspect of IECEX today is the large scale of industry and stakeholder involvement in the day to day management of IECEX.

### **3. Vision**

In line with the aim to cater to the needs of the international Ex related industries, the IECEX vision is simple but yet all embracing

***“IECEX sets out to be the global centre of excellence in the highly specialised Ex field”.***

### **4. Purpose of the Business Plan**

While business planning is an integral part of the day to day management of the IECEX System as reflected by the various committee and operational documents of the System, e.g. minutes of meetings, budgets, audited accounts and forecasts along with Secretariat Annual Reports etc this Business Plan provides a single source document to guide the business planning to steer IECEX forward in meeting the needs and challenges of the International Ex industry its seeks to serve.

This Business Plan will be used by the IECEX Secretariat, the IECEX Management Committee (ExMC) and Executive. The Business Plan covers:

- Long term strategic focus
- Development of a consistent approach by System participants,
- A framework from which System participants can operate with a large degree of autonomy,
- Funding framework for IECEX activities, including its Secretariat.

- A System for providing information to peak trade organisations (WTO, NAFTA, UN etc) and national governments on systems that can enhance safety and trade.
- Matters as requested from the IEC Conformity Assessment Board.

## **5. Objective of the IECEX System**

The objective of the IECEX System is to facilitate international trade in equipment and services related to explosive atmospheres, while maintaining the required level of safety. This core objective is to be achieved by:

- In accordance with the IEC Statutes and Rules, IECEX shall be self funding and where possible operate on a user pay system, with adequate reserves
- Reduced testing and certification costs to manufacturer and industry
- Reduced time to market for Equipment, Systems and Services
- One international database listing with free and open access
- Maintaining International Confidence in equipment and services covered by IECEX Certification
- Allowing the testing of products in different member economies to be recognised in all other member economies via a common certification regime.
- Allowing certified personnel to be recognised as competent in a variety of hazardous area activities anywhere in the world.
- Exchange of information and knowledge between national conformity assessment and certification organisations
- Ensuring that Conformity assessment and certification activities are uniform and transferable between countries.
- Conformity assessment and certification is coordinated to meet world needs and foster international trade and commerce in both product and services.

## **6. Values**

The values by which IECEX operates include: -

- Make decisions based on consensus among its members
- Delegates, members and the Executive respect each other, our families, our clients, those with different ideas and from diverse backgrounds, and other cultures
- Actively seek solutions
- Freely share knowledge and solutions to identified problems
- Act in an ethical and trustworthy way to achieve the objectives of the IECEX System
- Promote cooperation and collaboration amongst members to achieve the objectives of the IEC Ex System
- Professionalism – IECEX Officers, Executive, Members and experts will conduct themselves in a business-like manner to deliver efficient and expert services.
- Innovation – IECEX will strive for excellence, creativity, leading edge science and quality.

## **7. Strategic Context**

In the conduct of its business IECEX shall operate within the following strategic context:-

### **a. Confidence**

**Develop and maintain International Ex certification schemes that provide confidence among the users and stakeholders, eg manufacturers, end users, regulators and Certification Bodies**

Certificates issued by the IECEX Schemes are issued as “Electronic Certificates” and are live on the IECEX Website. This enables full public access for viewing and printing. Visit the [IECEX “On-Line Certificate” System](#)

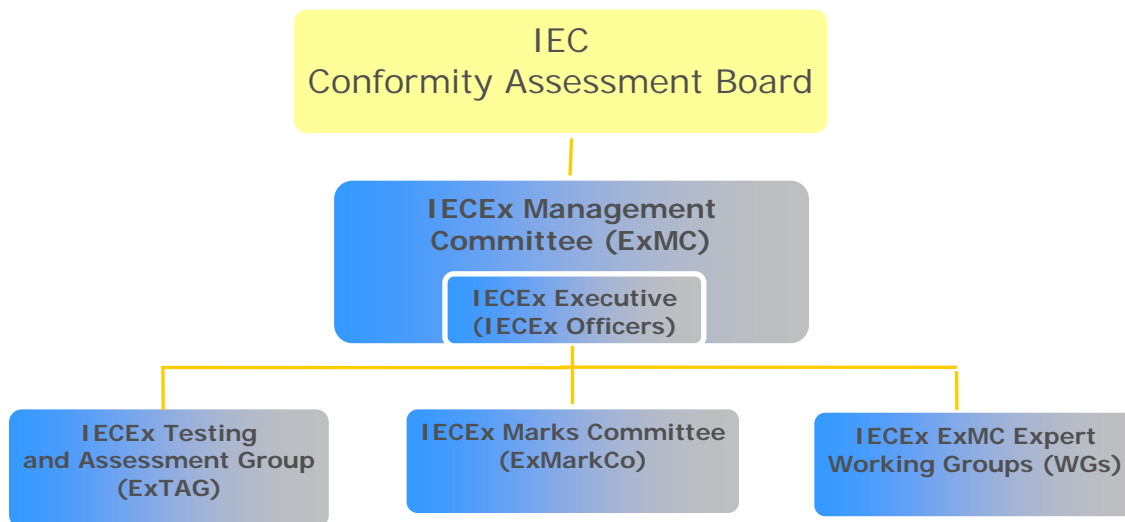
IECEX Certification Schemes are designed to meet and comply with the respective ISO/IEC Conformity Assessment Standards and Guides, eg ISO/IEC 17025, 17024 and Guide 65.

Each IECEX Test Lab and Certification Body is subjected to the IECEX peer assessment along with on-going surveillance and re-assessments to ensure on-going compliance with IECEX rules.

**b. Consistency**

**IECEX Certification activities shall operate on the basis of one single set of rules and operational procedures that are to be applied by all IECEX certification and Test Laboratories to ensure commonality of processes regardless of which IECEX Body is providing the certification service.**

To achieve this objective the IECEX shall operate with the following minimum elements, with the Management Committee reporting to the IEC Conformity Assessment Board, CAB follows:.



**c. Open Competition**

**IECEX shall not hinder fair and open competition among the IECEX Certification Service providers, ExCBs and industry**

While an objective of the IECEX is to provide a “standard” way of conducting testing and certification in the Ex field, it fully supports open competition and does not set to limit the ability of any IECEX Certification Body to charge fair and market competitive rates.

IECEX manufacturers / industry members will abide by “Antitrust Laws” when discussing common issues within the IECEX fora.

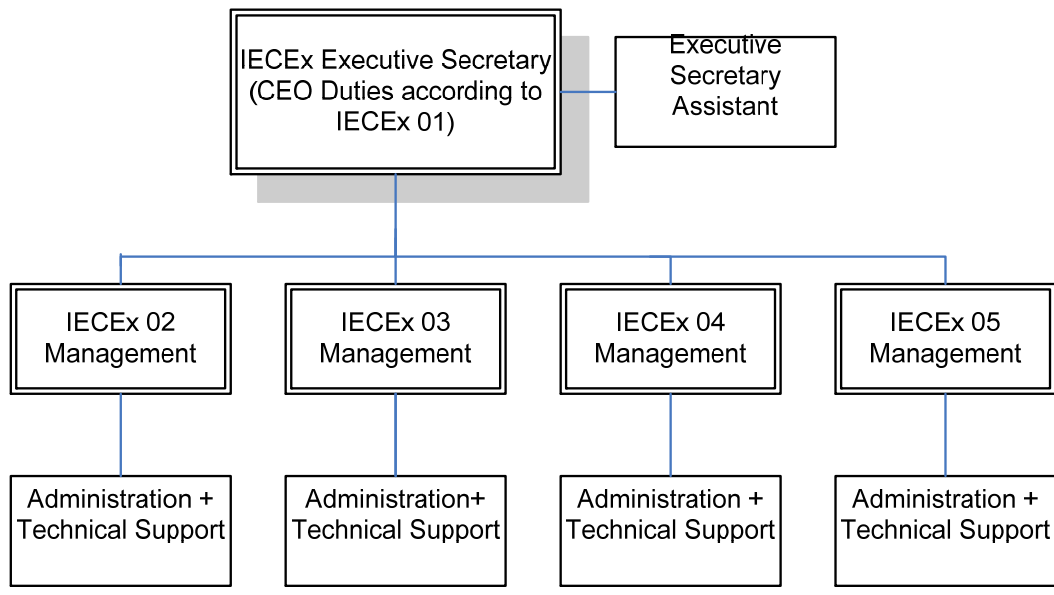
**d. Technical Secretariat**

**IECEX shall operate with a centralised Technical Secretariat with sufficient resources to ensure a timely response to**

- i) Work assigned to it by the IECEX Management; and**
- ii) Inquiries and assistance requested from ExCBs; and**
- iii) Inquiries and assistance requested from industry and stakeholders**

The core duties of the IECEX Executive Secretary are defined in the IECEX Basic Rules, publication IECEX 01, as approved by the IECEX Conformity Assessment Board.

Resources of the IECEX Technical Secretariat cover the following functions:



Functions of the Secretariat, detailed above, are currently covered by the appointed Executive Secretary supported by a combination of full time staff and casual/part time staff.

Secretariat costs are within the constraints of the approved annual budget that takes into account:

- workload
- current income
- sustained growth

**e. International Co operation**

**IECEX shall seek to cooperate with other international and regional organisations that may compliment the IECEX services**

IECEX recognises the value and need to cooperate with other international and regional organisations that may compliment the range of services IECEX provide.

**f. Co operation on matters of Accreditation**

**IECEX shall cooperate with National, Regional and International accreditation systems, with the goal to reducing multiple assessments providing the objectives and rules of the IECEX are met.**

IECEX along with the other IEC Conformity Assessment Systems has embraced the principles of Peer Assessment, however note the value in utilising national accreditation as part of the evidence gathering exercise for demonstrating compliance to ISO/IEC Standards and Guides by the IECEX Test Labs and Certification Bodies.

#### **g. Self Financing**

**In accordance with the IEC Statutes and Rules, IECEX shall be self funding and where possible operate on a user pay system**

While at the commencement of IECEX during the late 1990s the main source of revenue was via annual dues applied to IECEX Members. In 2005 IECEX Management Committee took the decision to apply a certificate fee as a means to move to a more “user pay” system.

This move has enabled IECEX to grow its funds to meet the costs of its growth and maintain its self funding status. IECEX has reconfirmed its strategy for maintaining a user pay system as its principal source of revenue.

#### **h. Use of Information Technology Systems**

**To ensure efficient workings IECEX shall use IT systems to their fullest extent including greater use of the Internet and the Electronic On-Line Certificate System**

The IECEX System shall utilize state of the art conferencing and collaboration tools to the extent possible.

The IECEX System maintains a dedicated Internet website that provides the following core functions;

1. Publicly accessible information concerning the rules and operations of the IECEX Schemes, along with updated listings of approved IECEX Certification Bodies
2. A Members only site as the centralized means for circulation and retention of committee documents and records
3. An electronic “On-Line” Certification system that provides
  - The registration of issued Test Reports and Assessment/audit reports
  - The issuing of Electronic master IECEX certificates and Licenses
  - Search, download and print capabilities

### **8. *Who are IECEX System Customers?***

The list of current and potential IECEX System customers include: -

- Member Bodies of the IECEX System, that is the IECEX System members and potential members
- Conformity Assessment operators (Testing, certification, accreditation, etc)
- Industry (eg manufacturers, repairers, etc)
- Consumers, including End Users
- Regulators
- Government agencies (trade, technical infrastructure, foreign and domestic policy)
- International standards organizations

## 9. Key Performance Indicators

The IECEX System develops resolutions at the IECEX System annual Management Committee meeting (IEC ExMC) that in many cases urge members to take action on standards and Conformity Assessment issues affecting their economies or region, and in some cases task the IECEX System Officers and IECEX System Secretariat to take certain actions.

Key performance indicators therefore are required to assess the performance of the organisation: -

- As seen by its Customers
- As measured by the effectiveness of its Processes
- As seen by the People who work with the IECEX System
- As seen by the effectiveness and efficiency of resources used by the IECEX System

These Key Performance Indicators shall track the deliverables of the System with specific targets as defined in the implementation plan.

The IECEX Members shall be provided with annual reporting from the Secretariat, eg Annual Report Card that provides as a minimum the following;

- Statistics, eg Membership, Certificates, Reports, etc
- Operational related activity
- Promotional activity
- Financial
- Others as requested by the ExMC

## 10. Risk

IECEX identifies the following key risks

- a) Not being relevant to Industry needs;
- b) Not responding to Industry and Stakeholder needs in a timely fashion;
- c) IECEX Certification Bodies + Test Laboratories operating outside the IECEX rules and Operational Documents
- d) Loss of a Dedicated Technical Secretariat; and
- e) Misuse of Marks, Logos and Certificates

## 11. IECEX Financial Principles

### General principle.

- a) The IEC Statutes and IECEX Basic Rules require that IECEX maintains a self funding model.

### General Reserve.

- b) The IECEX Management Committee have determined that IECEX should maintain as a minimum the equivalent of 2 years operating costs, in order to maintain the structure of the IECEX for a limited period, in the event of any major world crisis that may cause a temporary impact on the IECEX finances.

### Currency.

- c) The official currency of the IECEX is the Swiss Franc in line with IEC maintaining its official seat in Switzerland.

### Legal Compliance.

- d) IECEX as an integral part of the IEC complies with the statutory obligations of the IEC proper according to Swiss Law, including the annual independent audit of IECEX accounts.

**NOTES**