INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

QPS Evaluation Services
IECEx Industry Symposium
IECEx Past + Present

Chris AGIUS

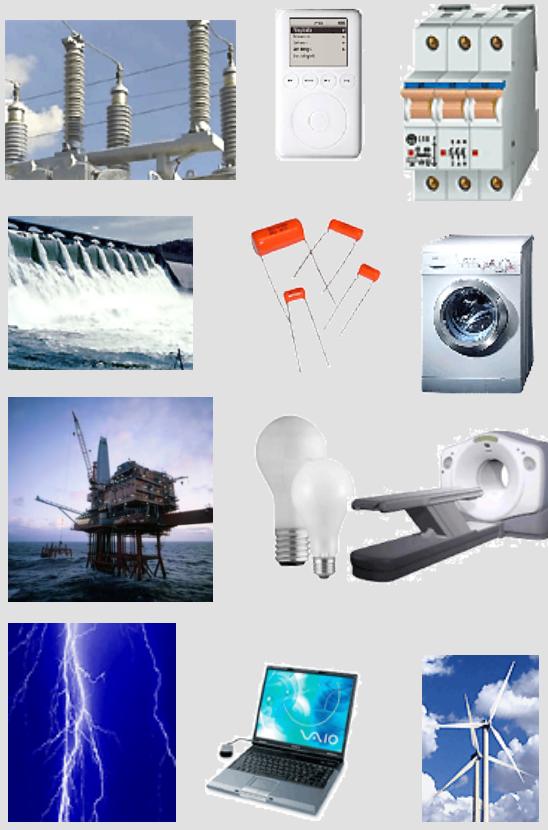
IECEx Executive Secretary

5 September 2012

Who is the IEC ?

- **International Electotechnical Commission**
- **Founded in 1906 - Promote international co-operation on all questions of standardization and related matters in the fields of electrotechnology, including Conformity Assessment.**

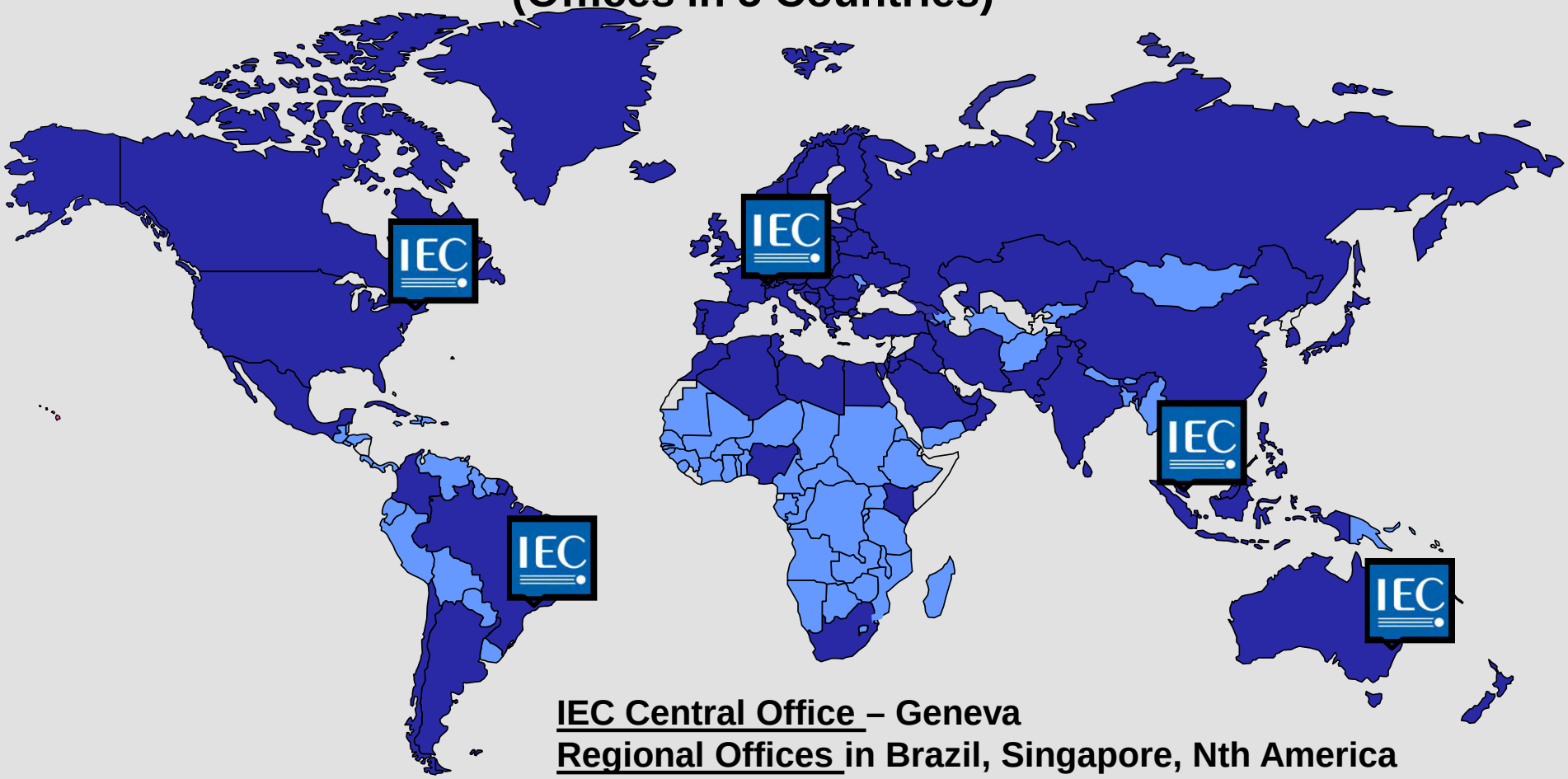
Operational Statistics – Standards Work	
IEC Standards + Publications	**6,959**
Technical Committees	175
Dedicated WGs + Task Teams	1,174
Industry Experts - worldwide	+10,000



IEC Family: 164 countries – Global Reach

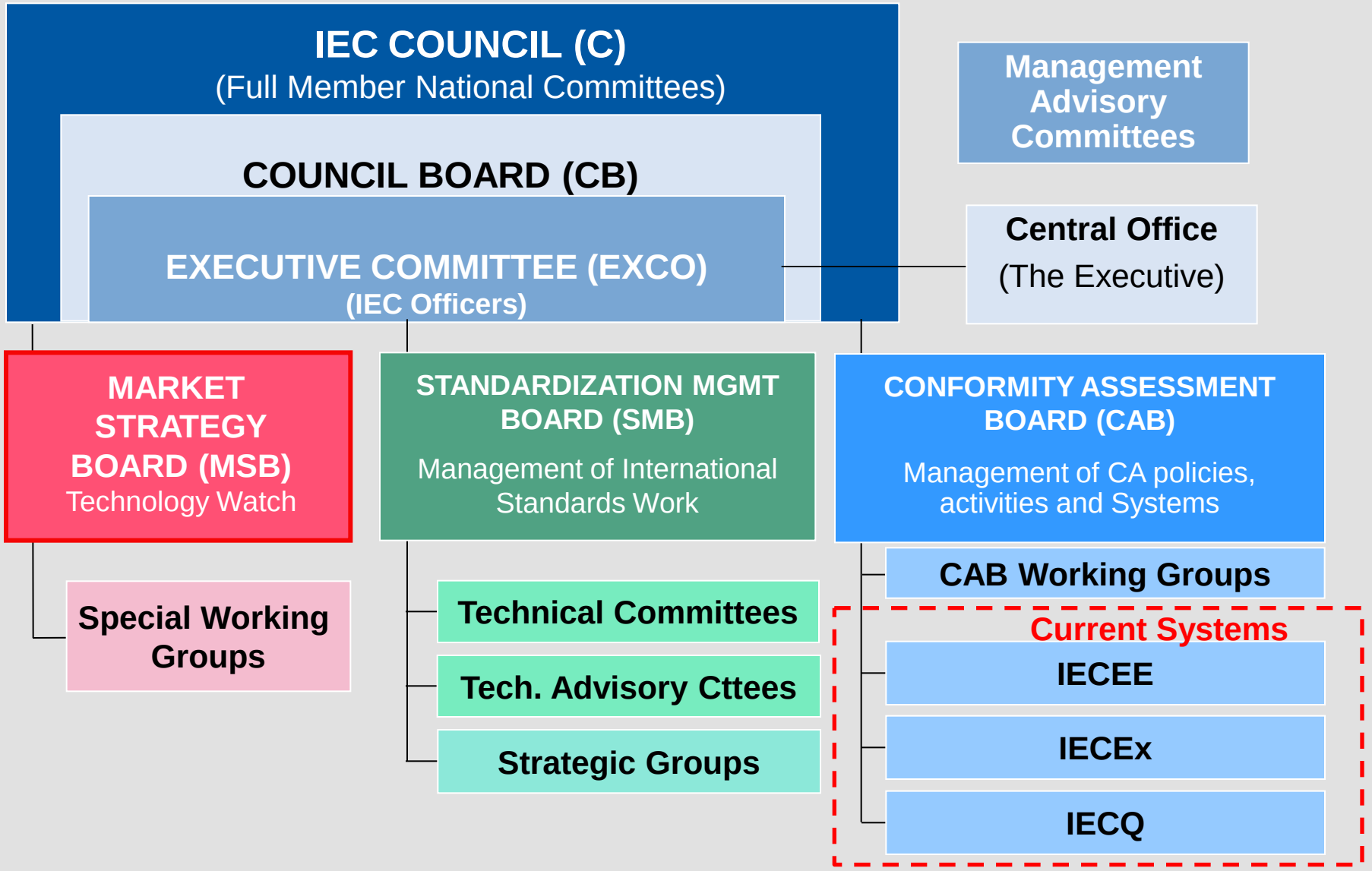
82 Members **82 Affiliates**

(Offices in 5 Countries)



IEC Central Office – Geneva
Regional Offices in Brazil, Singapore, Nth America and Australia

IEC Structure



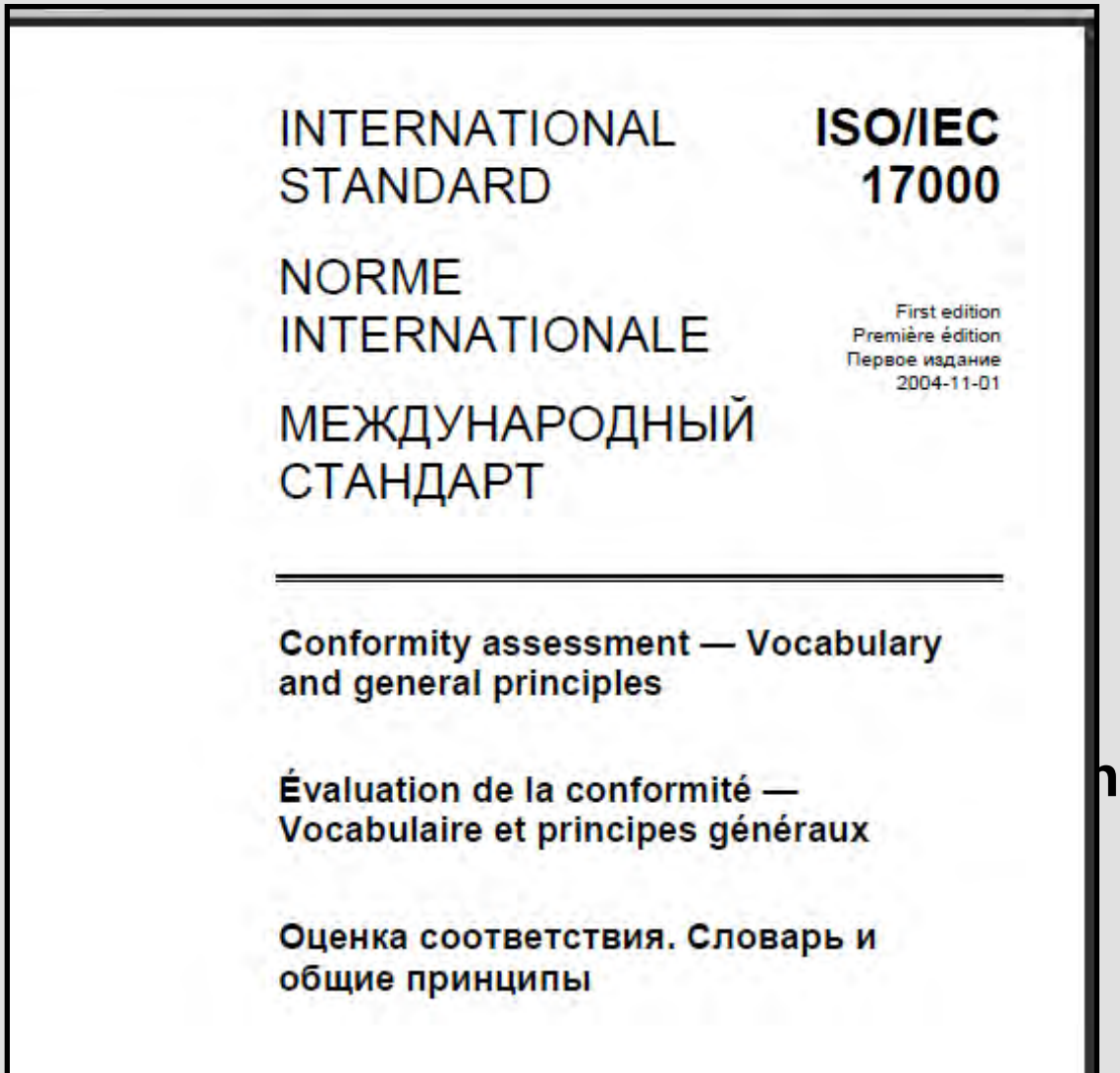
Some recent developments at IEC

- **Standards Work - New Technical committees:**
  - **TC 114 “Marine Energy – Wave/Tidal/water current converters”**
  - **TC 115 “High Voltage Direct Current Transmission - >100KV”**
  - **TC 116 “Safety of motor operated electric tools”**
  - **TC 117 “Solar Thermal electric plants”**
  - **TC 118 “Smart grid user interface”**
  - **TC 119 “Printed Electronics”**
  - **SC 31M “Non-Electrical Committee for Ex”**

- **Conformity Assessment – New/Emerging Activities:**
  - **IECEx Personnel Certification Scheme**
  - **IECEE Energy Efficiency Scheme**
  - **New IECQ Programme for “Counterfeit Avoidance - Electronic Components and Assemblies”**
  - **Development of an IEC Scheme for Marine Energy Converters and Installations**
  - **Development of an IEC Scheme for Wind Turbines**

Terminology/meaning can be Confusing ??

“CONFORMITY ASSESSMENT”



INTERNATIONAL STANDARD

NORME INTERNATIONALE

МЕЖДУНАРОДНЫЙ СТАНДАРТ

ISO/IEC 17000

First edition
Première édition
Первое издание
2004-11-01

Conformity assessment — Vocabulary and general principles

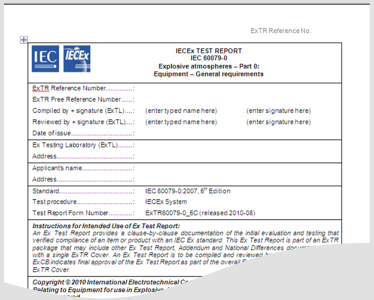
Évaluation de la conformité — Vocabulaire et principes généraux

Оценка соответствия. Словарь и общие принципы

Certificate of Conformity versus Test Report

Test Report:-

- What Information is being conveyed by a Test Report?
- Who is the legal owner of the Test Report?
- Should an End User have free access to a Test Report, how?
- How long is a test report Valid, after its issue?


IECEx TEST REPORT
IEC 60079-0
Explosive atmospheres – Part 0: Equipment – General requirements

Certificate of Conformity (third Party according to ISO/IEC Guide 67)

- What Information is being conveyed by a Certificate?
- Who is the legal owner of the Certificate?
- Should an End User have free access to a Certificate, how?
- How long is a Certificate Valid, after its issue?

IECEx Certificate of Conformity
INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
Physikalisch-Technische Bundesanstalt (PTB)

Ex - IEC 60079-0 Clause 28.1, 28.2, 28.3 +29.3

28.2 Certificate

The manufacturer shall prepare, or have prepared, a certificate confirming that the equipment is in conformity with the requirements of this standard along with its other applicable parts and additional standards mentioned in Clause 1. The certificate can relate to Ex equipment or an Ex Component.

An Ex Component certificate (Identified by the symbol "U" suffix to the certificate number) is prepared for parts of equipment that are incomplete and require further evaluation prior to incorporation in Ex equipment. The Ex Component certificate may include a Schedule of Limitations detailing specific additional evaluation required as part of incorporation into Ex equipment. An Ex Component certificate shall clarify that it is not an Ex equipment certificate.

29.3 Marking – General Item d)

d) the name or mark of the certificate issuer and the certificate reference in the following form: the last two figures of the year of the certificate followed by a "." followed by a unique four character reference for the certificate in that year;

Definitions

ISO/IEC 1700 Definitions

2.4
third-party conformity assessment activity
conformity assessment activity that is performed by a person or body that is independent of the person or organization that provides the object, and of user interests in that object

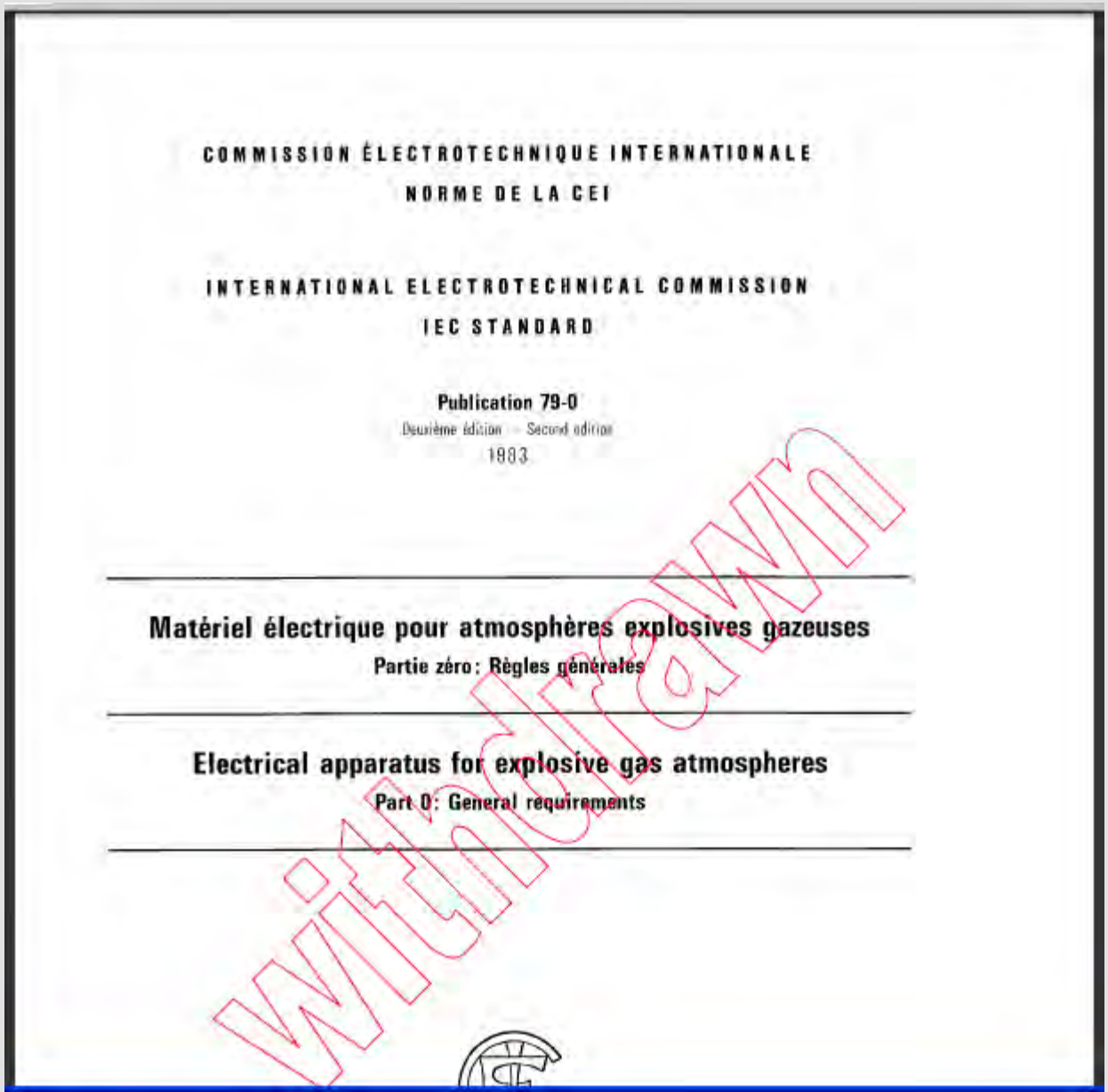
NOTE 1 Criteria for the independence of conformity assessment bodies and accreditation bodies are provided in the International Standards and Guides applicable to their activities (see Bibliography).

IEC 60079-0 Definitions

3.8 certificate
document that assures the conformity of a product, process, system, person, or organization with specified requirements

NOTE The certificate may be either the supplier's declaration of conformity or the purchaser's recognition of conformity or certification (as a result of action by a third party) as defined in ISO/IEC 17000

Long Standing Testing / Assessment Requirements for Ex Equipment



COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

NORME DE LA CEI

INTERNATIONAL ELECTROTECHNICAL COMMISSION

IEC STANDARD

Publication 79-0

Deuxième édition — Second edition

1983

Matériel électrique pour atmosphères explosives gazeuses

Partie zéro: Règles générales

Electrical apparatus for explosive gas atmospheres

Part 0: General requirements

Withdrawn

Assessment and Tests for Ex Equipment – IEC 79-0 1983

- Verification of documents
- Compliance of Prototype with documents
- Marking Requirements
- Type Tests – include:
  - Mechanical Tests
  - Resistance to Impact
  - Thermal Tests
  - Insulation Resistance of plastic parts
  - Test in explosive mixtures
  - Test of clamping of cables

The Ex Marketplace

Manufacturers trade Globally

Re-testing/ Re-certification

- **Adds undue costs**
- **Results in delays to access markets**
- **Denies smaller countries access to new products/technology**

<u>IECEx Provides a Single Global Process System:-</u>

- **Qualifying and Monitoring the operation of credible Certifiers + Labs**
- **Issuing of Test Reports and International Certificates that can either:**
  - **-Be exchanged among participating Certifiers (ExCBs)**
  - **-Be used both on a voluntary (purchasing requirements) or Regulatory basis.**

What is IECEx?

"IECEx is the International Standard way of doing Ex Certification"

The IEC's System with Schemes covering Certification to Standards that relate to Equipment, Services and Persons in areas relating to Explosive Atmospheres, to provide an Internationally accepted means of *demonstrating claimed compliance with International Standards*

IECEx is a "Conformity Assessment Tool" providing confidence that Products, Services and Personnel covered by an IECEx Certificate meet specified requirements, (International Standards)

IECEx History - Overview

- **1992 – TC 31 Concept - IEC survey reveals agreement to develop a standalone International Ex scheme, WGEx formed to develop nucleus of a Scheme. Convener - Nick Maalouf**
- **1994 – IECEE 04 Rules published / 1999 converted to IECEx 01**
- **1996 – First meeting of Management Committee in London, appointment of Officers (Ian Cleare first IECEx Chairman)**
- **1997 – 1999 Development of IECEx structure, including first round of peer assessments.**
- **1999 – Scheme commences "Transitional" Operation - Issue Reports**
- **2000 – First National Ex Certificate issued on basis of IECEx Test and Assessment Report**
- **2002 – IECEx Management decision to move to FULL level and issuing of "IECEx Certificates of Conformity"**
- **2003 – IECEx "On-Line" Certificate of Conformity System in operation – FIRST IECEx Certificate issued – 130 CoCs issued 1year**
- **2007 – IECEx Services Scheme / Repair. Launched**
- **2010 – New IECEx Certified Persons Scheme Launched**
- **2011 – United Nations UNECE formally endorses IECEx.**

Schemes within the IECEx System

IECEx System
www.iecex.com

IECEx Equipment Scheme
Certification of Ex Equipment + Systems

Choice between:

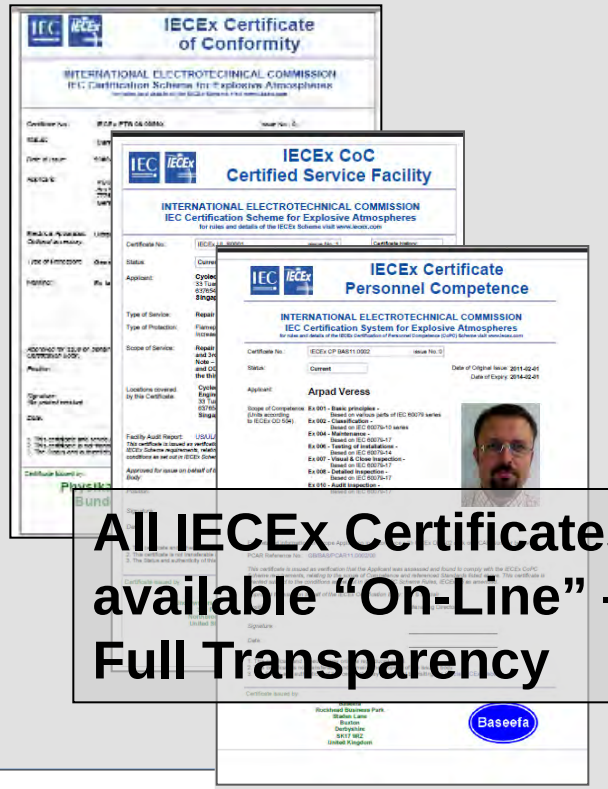
- IECEx "Certificate of Conformity"
- IECEx "Component Certificate"
- IECEx "Unit Verification" Cert.

IECEx Conformity Mark License Scheme

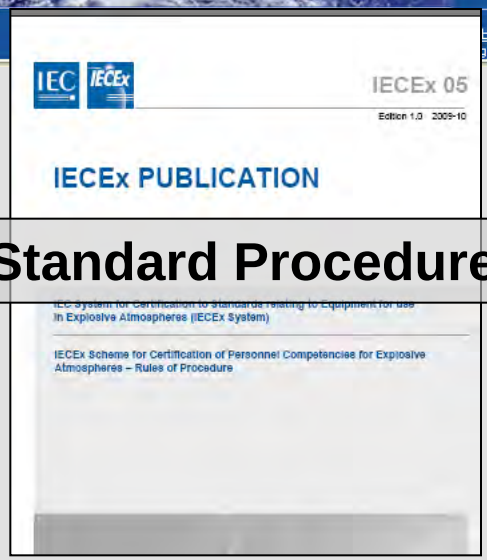
IECEx Services Scheme
Certification of Ex Service Providers, eg Repair and overhaul workshops

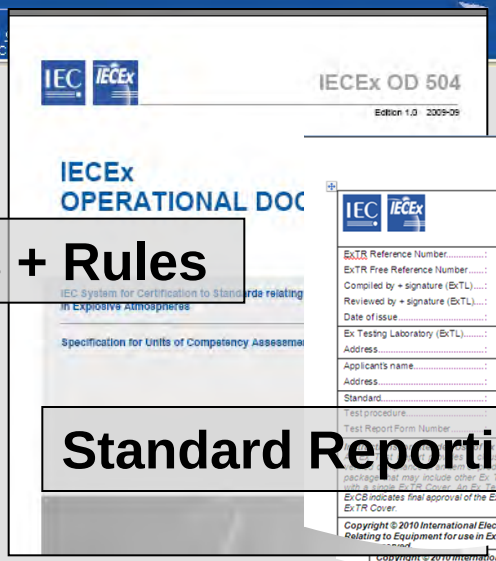
IECEx Certified Persons Scheme (CoPC)
Competency to work in Ex field (New)

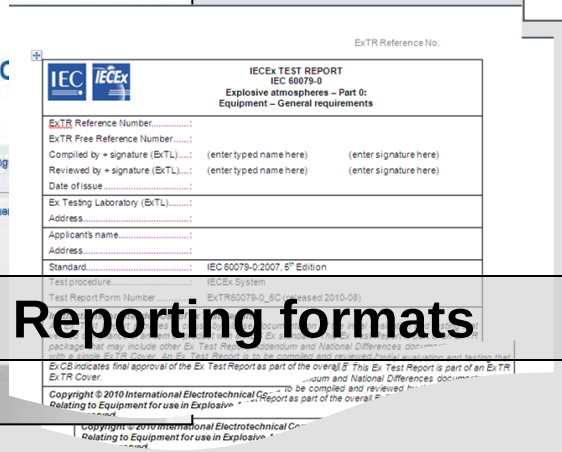
IECEx – Overview



All IECEx Certificates available "On-Line" – Full Transparency







Standard Procedures + Rules

Standard Reporting formats

Logo + Mark

IECEx Structure

IEC CONFORMITY ASSESSMENT BOARD, CAB

Oversees IEC Conformity Assessment policy and Systems, eg IECEx

IECEx Management Committee, ExMC

National Members (Countries)

Overall management of the IECEx System

- Officers + Executive, TC 31 Chair, IEC Gen. Sec
- ExMC Expert Working Groups (WGs)
- IECEx Expert Assessors

IECEx Secretariat

- Technical Support
- Administration

Ex Office Members

- IEC General Secretary
- IEC TC 31 Chairman

IECEx Technical Assessment Group

Members: ExCBs + ExTLs

- ExTAG Expert WGs
- TC 31 + SC Liaison

IECEx Marks Committee

Operation of IECEx Mark

- Appointed Members
- IECEx Executive

IECEx CoPC Committee

Operation of Personnel Cert

- Appointed Members
- IECEx Executive

IECEx Certification – Equipment Scheme - System 5 ISO/IEC Guide 67

Product Testing

IECEx

Assessment and Test

Report

ExTR

Testing of Samples (Type Testing)

International Standards

\+

Factory Audit + Ongoing surveillance

IECEx

Quality

Assessment Report

QAR

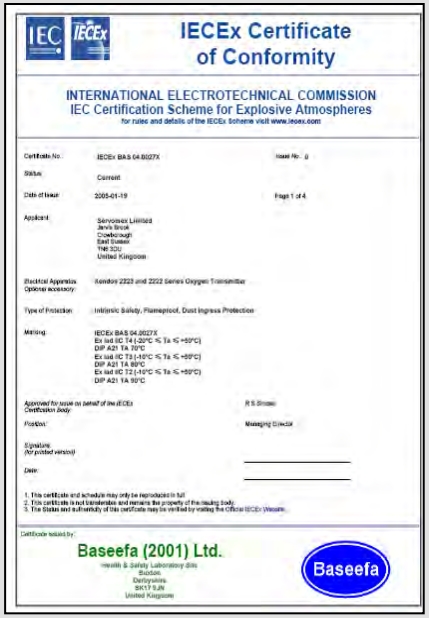
Assessment of Manufacturers Quality System

ISO/IEC 80079-34

In line with EN 13980 and Based on ISO 9001

=

IECEx Certification


IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

Baseefa (2001) Ltd.

Baseefa

Live "On-Line" System

In-built controls

Consistent format

Search capabilities

Covers all production units

IECEx Certification – Unit Verification

Each Unit must be tested / assessed by the IECEx Body And identified on the Certificate, by serial No.

Product Test/Asses.

IECEx Assessment and Test Report ExTR

Testing of Samples (Type Testing)

IEC/TC 31 International Standards

+

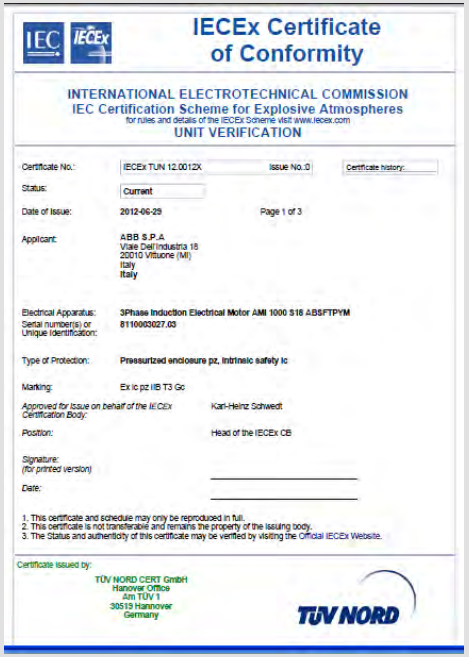
Factory Audit + Ongoing surveillance

IECEx Quality Assessment Report QAR

Assessment of Manufacturers Quality System

ISO/IEC 80079-34 In line with EN 13980 and Based on ISO 9001

=



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com
UNIT VERIFICATION

Certificate No.: IECEx TUN 12.0012X Issue No.:0 Certificate history:
Status: Current
Date of Issue: 2012-06-29 Page 1 of 3
Applicant: ABB S.P.A
Viale Dell'Industria 18
20010 Vittuone (MI)
Italy
Italy
Electrical Apparatus: 3Phase Induction Electrical Motor AMI 1000 S18 ABSFTPYM
Serial number(s) or Unique Identification: 8110003027.03
Type of Protection: Pressurized enclosure pz, Intrinsic safety ic
Marking: Ex ic pz IIB T3 Gc
Approved for issue on behalf of the IECEx Certification Body: Karl-Heinz Schwedt
Position: Head of the IECEx CB
Signature: (for printed version)
Date:
1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.
Certificate issued by:
TÜV NORD CERT GmbH
Hanover Office
Am TÜV 1
30519 Hannover
Germany
TÜV NORD

Live "On-Line" System

In-built controls

Consistent format

Search capabilities

Covers only Units identified

IECEx Certificate, Meaning

Question:

What does an ExCB Certify when issuing an IECEx CoC?

Answer:

The manufacturer's capability to consistently produce the product/equipment, listed on the certificate to be in compliance with the standards also listed on the Certificate.

IECEx 02: 2010 Clause 5.1 Extract:

"The certificate will attest that the equipment's design conforms to the relevant IEC or ISO standards and that the manufacturer is manufacturing the product under a quality system and associated quality plan(s), meeting the requirements of this Scheme and under the surveillance of an ExCB".

Same Philosophy across all IECEx Schemes, Certified Services Scheme + Certified Persons Scheme – "INDEPENDENT VERIFICATICATION of CLAIMED COMPLIANCE."

Benefits of Conducting Conformity Assessment thru IEC and IECEx

- **IEC Brand**
  - **Global recognition - industry**
  - **International recognition eg WTO + UN recognised**
  - **IEC Standards used Nationally**
- **Open and Transparent Process**
  - **Clear Rules**
  - **Transparency in process and results**
- **Industry have a say and provide direct input.**
- **Consistency in CA processes among participating Certification Bodies.**

Key Demand Drivers for IECEx

- Removal of costly duplication of testing/Cert at local level + delays to accessing markets
- Confidence among Industry, Regulators + Stakeholders – Ex equipment + Systems, high capital cost
- Confidence among Bodies (Labs + Certifiers), level playing field for CBs and TLs to compete
- Portability of assessment results + certs
- Ex Services + Personnel Cert now covered
- Instant access to information, including “On-Line” Certificates – instant checking.

IECEx Key Features

- **ALL Test Reports, Assessment and Audit Registered on IECEx Website *(All IECEx Schemes***
- **Certificates issued by ALL ExCBs located in the one website place *(for All IECEx Schemes)***
- **Electronic Certificates are the Master Version**
- **On-Line Certificate System with safeguards:**
  - **System generates Report and Certificates numbers**
  - **ExCBs only issues Certificates within approved scope**
  - **Others, eg ExCBs cannot delete certificates etc**
  - **Dedicated Technical Secretariat with CEO Duties to deal with day to day running of IECEx**

IECEx Key Features

- **ALL IECEx Test Labs (ExTLs) and Ex Certification Bodies (ExCBs) undergo same assessment**
  - ***Initial***
  - ***Annual***
  - ***Reassessment***
  - ***On-going monitoring***
- **Common Procedures by all ExCBs+ExTLs**
- **IECEx Proficiency Testing Programme by PTB**
- **IECEx have an Appeals Process**
- **Central Dedicated Secretariat + Active Executive**
- **Self funding + Report to IEC CAB**

IECEx On-Line CoC System key Features

- **Web site version is the MASTER**
- **Certificates issued by ALL ExCBs in the one place – *if not on IECEx website – then not issued !***
- **Data Backed up by IEC Central Office, Geneva**
- **Certificate / Report Number <u>automatically generated by system</u>, *all Cert. Nos begin with "IECEx…."***
- **Certificates + reports deleted <u>only</u> by Secretariat**
- **Editing only allowed during first 14 days after issue of the Certificate**
- **ExCBs only issue CoCs within their scope**
- **Supported by technical Secretariat.**

IECEx On-Line Certificate System

Certificate of Conformity: IECEx ITS 07.0008X - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites

Address http://iecex.iec.ch/iecex/iecexweb.nsf/ae7eea0d12561594c1256d0200448859/607c74650e91a0e2c1257928002f3a9c?OpenDocument

IECEx CoC Home » Certified Equipment Scheme » Certificate of Conformity

important information !

CoC ONLINE

- iecex.iec.ch:
  - Home / Search
  - Certified Service Facilities
  - Conformity Mark Licenses
  - Certified Persons
- View by:
  - "All ExCBs" Certificates
  - Certificate ref. number
  - IECEx Cert. Body (ExCB)
  - Applicant
  - Applicant Location
  - Manufacturer location
  - Country/Standards/ExCBs
  - Standard used
  - ExTRs
  - QARs
- Services:
  - Export to MS Excel
  - Operational Manual

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx ITS 07.0008X issue No.:2

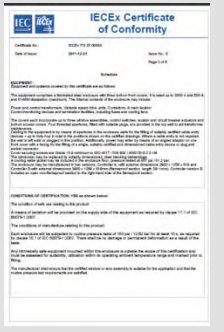
Certificate history:
Issue No. 2 (2011-12-21)
Issue No. 1 (2010-6-9)
Issue No. 0 (2007-3-26)

Status: **Current**

Date of Issue: **2011-12-21** Page 1 of 5

Applicant: **Joy Mining Machinery**
Thorn Hill Industrial Park
177 Thorn Hill Road
Warrendale
PA 15086
United States of America

Electrical Apparatus: **Controller Enclosure 7LS1A / Type 5000033161**
Optional accessory:



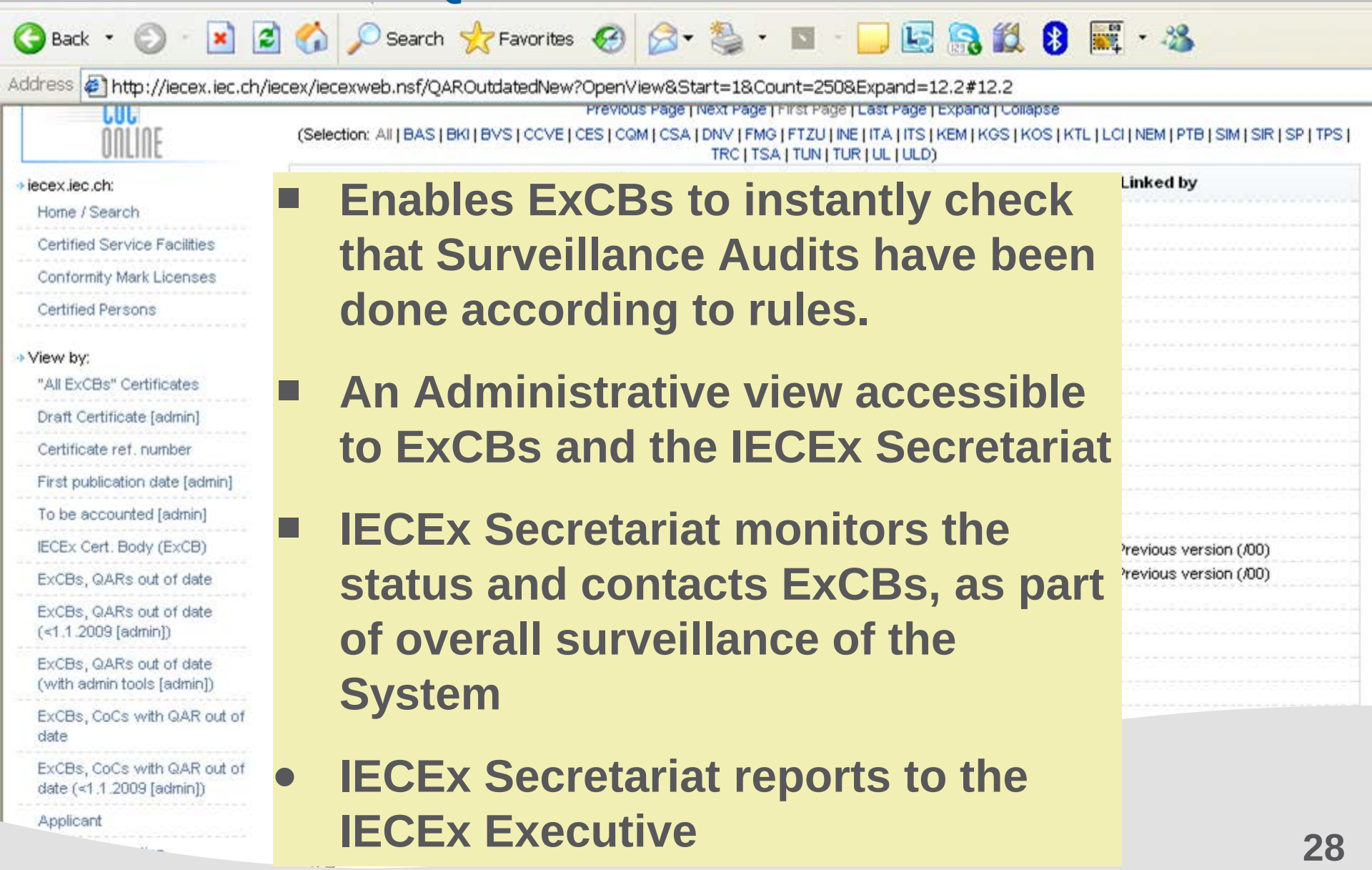
http://iecex.iec.ch - IECEx Quality Assessment Report: QARs - Microsoft Interne...

QAR Reference Number *: (automatic numbering)	GB/SIR/QAR07.0007/02
Related QARs:	GB/SIR/QAR07.0007/00 GB/SIR/QAR07.0007/01
Status*:	Issued
QAR Free Reference Number*:	GB/SIR/QAR07.0007/00
Audit Date*: (yyyy-mm-dd)	2011-06-27
Date of Issue*: (yyyy-mm-dd)	2007-02-05
Details of change*:	Surveillance Audit
Valid until*: (yyyy-mm-dd)	2012-08-01
Site(s) audited*:	Joy Mining Machinery Thorn Hill Industrial Park 177 Thorn Hill Road Warrendale PA 15086 USA
Issuing ExCB*:	SIR - SIRA Certification Service
Manufacturer*:	Joy Mining Machinery Thorn Hill Industrial Park 177 Thorn Hill Road Warrendale PA 15086 USA
Country of Manufacture*:	United States of America
Product information*:	see attachment
Protection concept*:	see below comment section
Related IECEx Certificates: (automatic linking)	IECEx SIR 10.0134X issue: 0 [Current] IECEx SIR 11.0077 issue: 0 [Current] IECEx ITA 08.0011X issue: 2 [Current] IECEx SIR 11.0114 issue: 0 [Current] IECEx ITA 11.0021X issue: 0 [Current]

Done

Internet

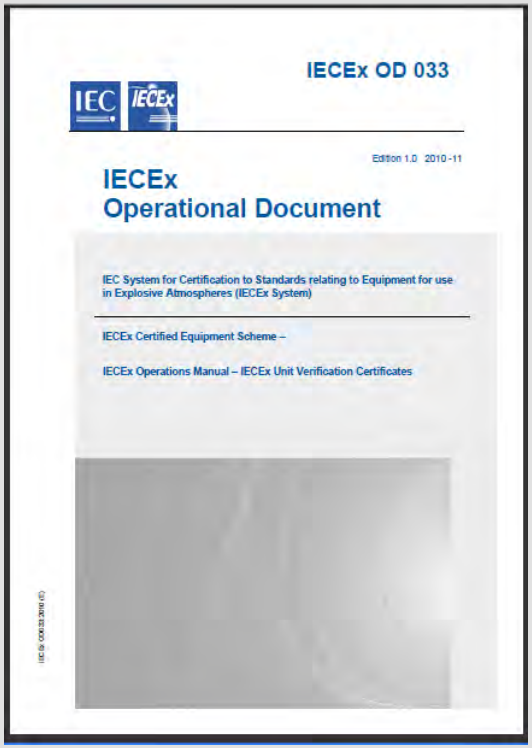
IECEx On-Line Certificate System – New "QAR out of Date Search" Feature



- Enables ExCBs to instantly check that Surveillance Audits have been done according to rules.
- An Administrative view accessible to ExCBs and the IECEx Secretariat
- IECEx Secretariat monitors the status and contacts ExCBs, as part of overall surveillance of the System
- IECEx Secretariat reports to the IECEx Executive

IECEx Unit Verification Certificate

- IECEx OD 033 – Operational Procedure
- Covers specific Items identified on the IECEx CoC (eg serial number)
- Full and Compliant ExTR(s) required
- Does not require Factory Inspection/audits
- Examples being specialised “One-Offs” or limited quantities



IECEx Unit Verification Certificate

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com
UNIT VERIFICATION

Certificate No.: IECEx TUN 12.0012X issue No.:0 Certificate history:

Status: Current

Date of Issue: 2012-06-29 Page 1 of 3

Applicant: **ABB S.P.A**
Viale Dell'Industria 18
20010 Vittuone (MI)
Italy
Italy

Electrical Apparatus: **3Phase Induction Electrical Motor AMI 1000 S18 ABSFTPYM**
Serial number(s) or Unique Identification: **8110003027.03**

Type of Protection: **Pressurized enclosure pz, intrinsic safety ic**

Marking: Ex ic pz IIB T3 Gc

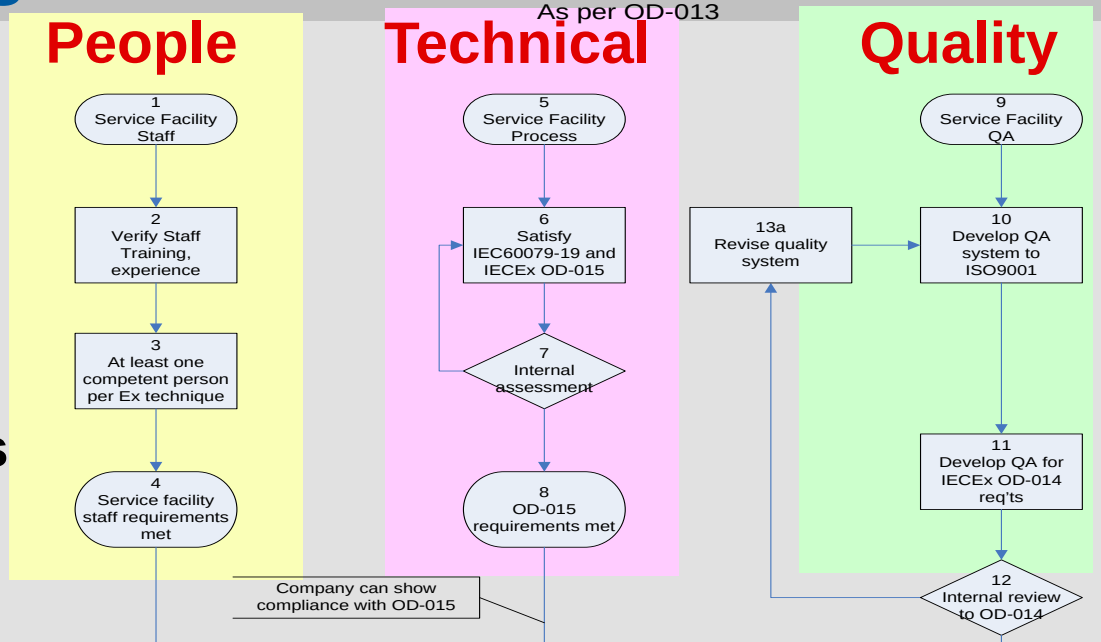
Approved for issue on behalf of the IECEx Certification Body: Karl-Heinz Schw

- Issued on the basis of Satisfactory ExTR
- Only covers items actually assessed/tested
- Not require Factory inspection nor ongoing surveillance
- Items traceable on certificate via serial numbers/etc
- Can cover more than 1 item but all serial Nos appear .

IECEx Services Scheme – Repair Workshops

IECEx Scheme Rules:
-IEC 60079-19
-IECEx 03 Rules
-IECEx OD 013 Procedures
-IECEx OD 014 QA Requirements
-IECEx OD 015 Requirements
-IECEx OD 016 ExCB Criteria
-Audit Report Forms
-On-Line Certificates
-IECEx 03A Guide to Applicant Workshops www.iecex.com

Current work to cover Service Ogranisations (WG10) providing:-
-Installation + Initial Inspection
-Inspection + Maintenance
-Design and Selection
-Area Classification



IECEx Certified Service Facility IECEx BAS S0013 - Windows Internet Explorer
http://iecex.iec.ch/iecex/iecexcsf.nsf/uid/FF7F63CF846A6AC6C1257A0C004F60D4?OpenDocument
File Edit View Favorites Tools Help
Favorites
IECEx Certified Service Facility IECEx BAS S0...

IECEx CoC
Certified Service Facility

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx BAS S0013 issue No.:1	Certificate history: Issue No. 1 (2012-6-13) Issue No. 0 (2011-1-27)
Status:	Current	Date of Issue: **2012-06-13**
Applicant:	**ABB Pte Ltd** 2 Tuas Lane 638611 **Singapore**	
Type of Service:	**Repair and Overhaul according to IEC 60079-19**	
Type of Protection:	Flameproof Enclosure "d" Increased Safety "e" Type of Protection "n"	
Scope of Service:	**On site Repair and Overhaul of Exd, Exe, Exde, Exn Rotating Machine and enclosures .** **Off site work limited to replacement of machine bearings.**	
Locations covered by this Certificate:	as above	

http://iecex.iec.ch/iecex/iecexcsf.nsf/Applicant%20Location?OpenView&Start=1&Count=250&Expand=

http://iecex.iec.ch/iecex/iecexcsf.nsf/Applicant%20Location?OpenView&Start=1&Count=250&Expand=6&RestrictToCategory=2012#6

File Edit View Favorites Tools Help

Favorites http://iecex.iec.ch/iecex/iecexcsf.nsf/Applica...

IECEx Guest User | ExCB

IECEx Certified Service Facility

IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEx System)

IECEx CoC Home > Certified Service Facility Scheme > Listing

View by **Applicant Location** : (2012)

Previous Page | Next Page | First Page | Last Page | Expand | Collapse

(Selection: All | **2012** | 2011 | 2010 | 2009 | 2008 | 2007)

	Country / Location	Name	Certificate No	Issue Date	Service Type
2	⊞ **Australia**				
2	⊞ **Malaysia**				
2	⊞ **Singapore**				
1	⊞ **Switzerland**				
4	⊞ **The Netherlands**				
7	⊟ **United Kingdom**				
1		⊞ ERIKS Electron Mechanical Services			
1		⊞ Foster Clark Engineering Limited			
1		⊞ Quartzelec Limited			
3		⊞ Sulzer Dowding & Mills			
1		⊞ Sulzer Dowding & Mills Ltd			
18					

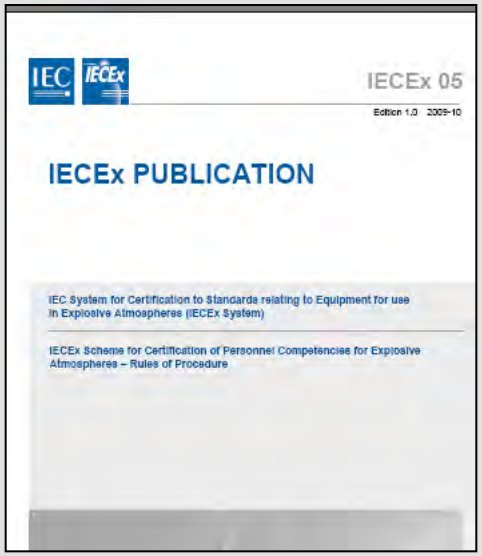
Previous Page | Next Page | First Page | Last Page | Expand | Collapse

CoC ONLINE

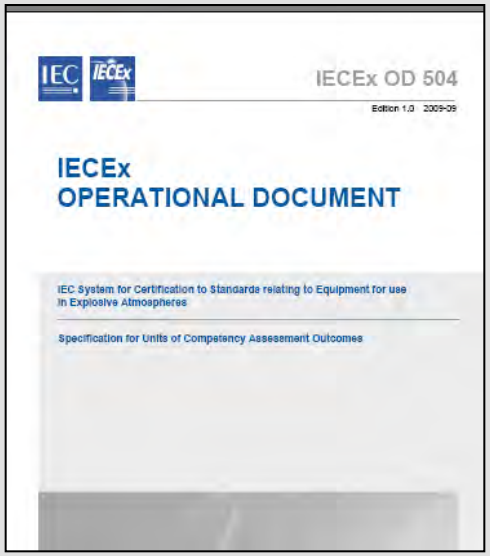
- iecex.iec.ch:
  - Home / Search
  - Certified Equipment
  - Conformity Mark Licenses
  - Certified Persons
- View by:
  - "All ExCBs" Certificates
  - Certificate ref. number
  - IECEx Cert. Body (ExCB)
  - Applicant
  - Applicant Location
  - FAQs
- Services:
  - Export to MS Excel
  - Operational Manual

IECEx Certified Persons Scheme -

- Same IEC TC 31 Standards already used by IECEx apply, 60079-10, -19, -14, -17
- Certifies a Person's Competence to be able to apply the Standards
- Manufacturers now interested



Scheme Rules

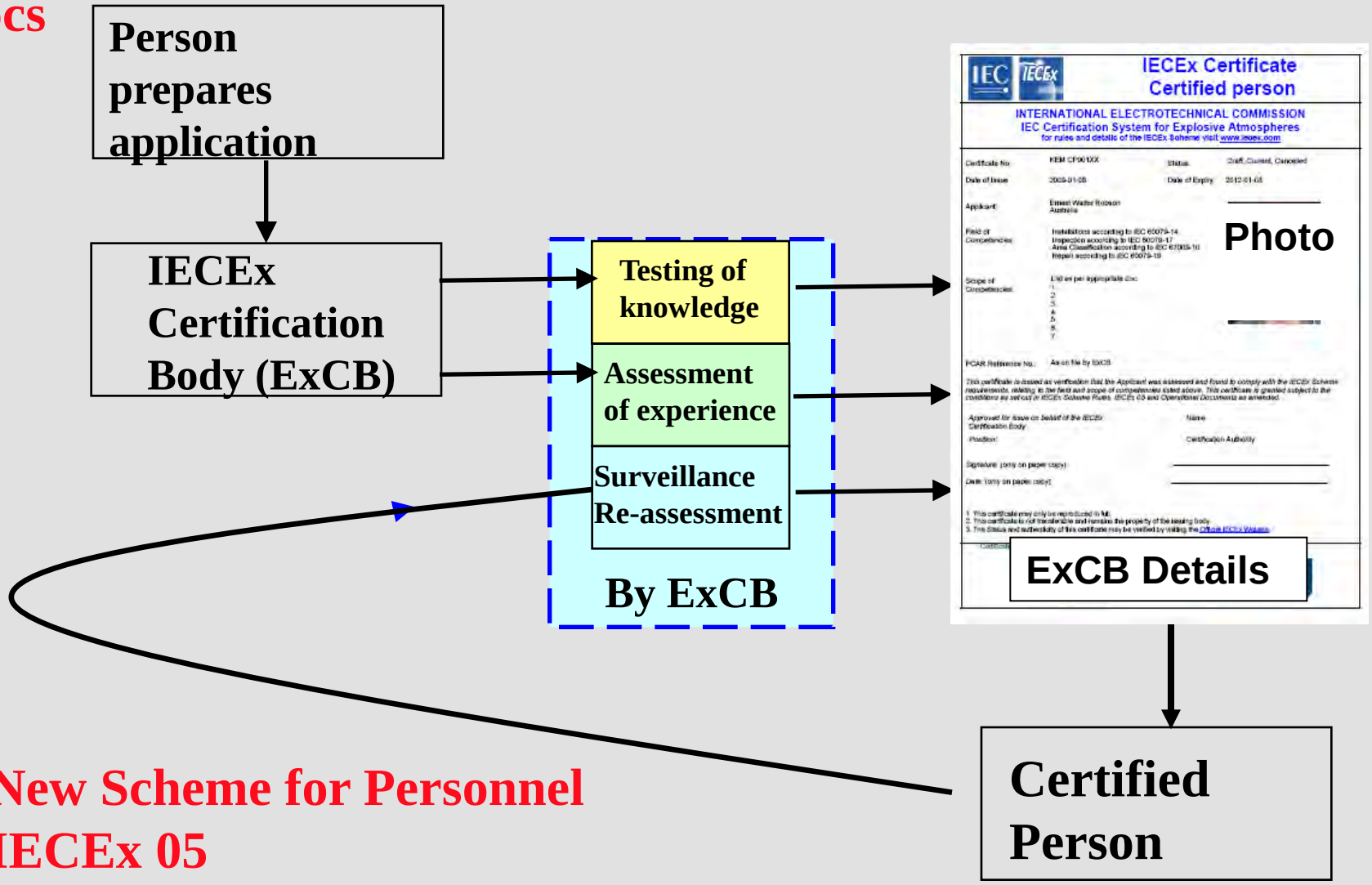


Operational Documents

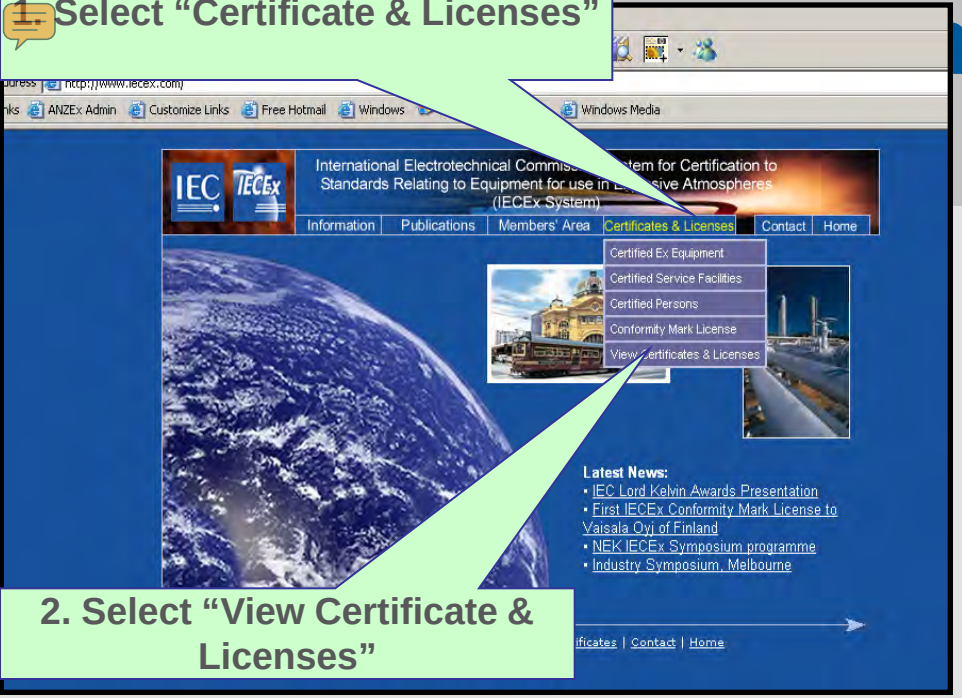
Unit Ex 001 – Basic principles of protection in explosive atmospheres
Unit Ex 002 – Perform classification of hazardous areas
Unit Ex 003 – Install explosion-protected equipment and wiring systems
Unit Ex 004 – Maintain equipment in explosive atmospheres
Unit Ex 005 – Overhaul and repair of explosion- protected equipment
Unit Ex 006 – Test electrical installations
Unit Ex 007 – Perform visual & close inspection
Unit Ex 008 – Perform detailed inspection
Unit Ex 009 – Design electrical installations
Unit Ex 010 – Perform audit inspection of installations

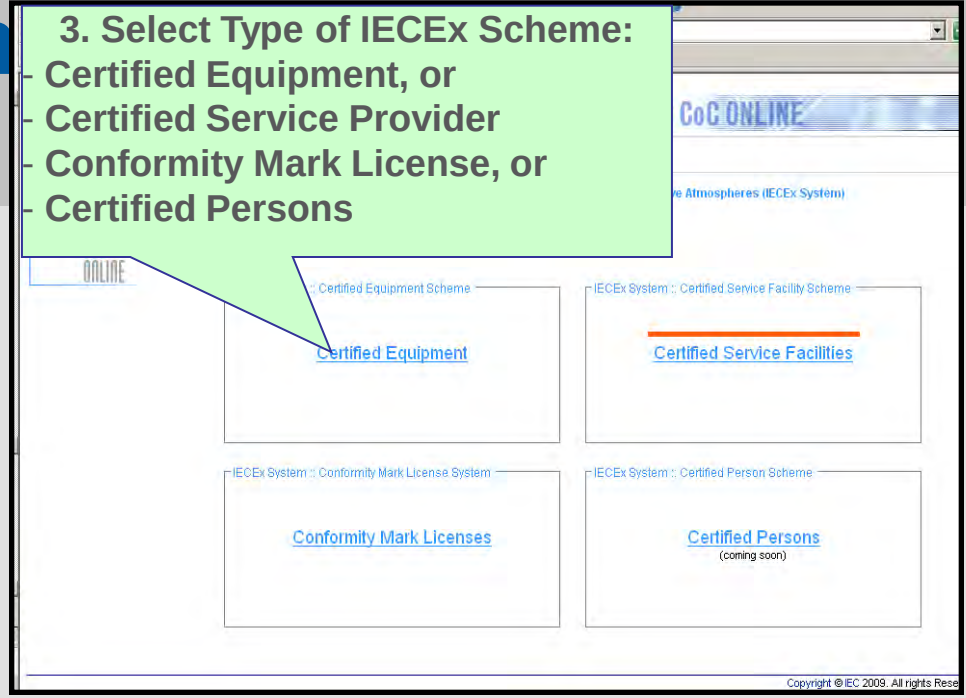
IECEx Cert Persons Scheme -

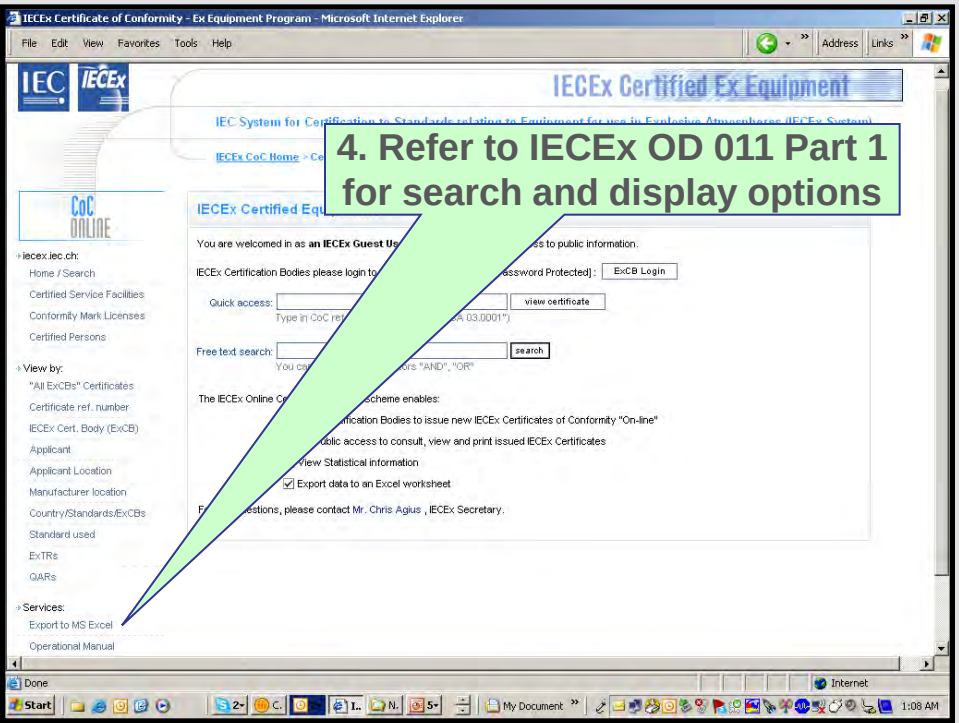
According to ISO/IEC 17024 + IECEx Rules + Operational Docs

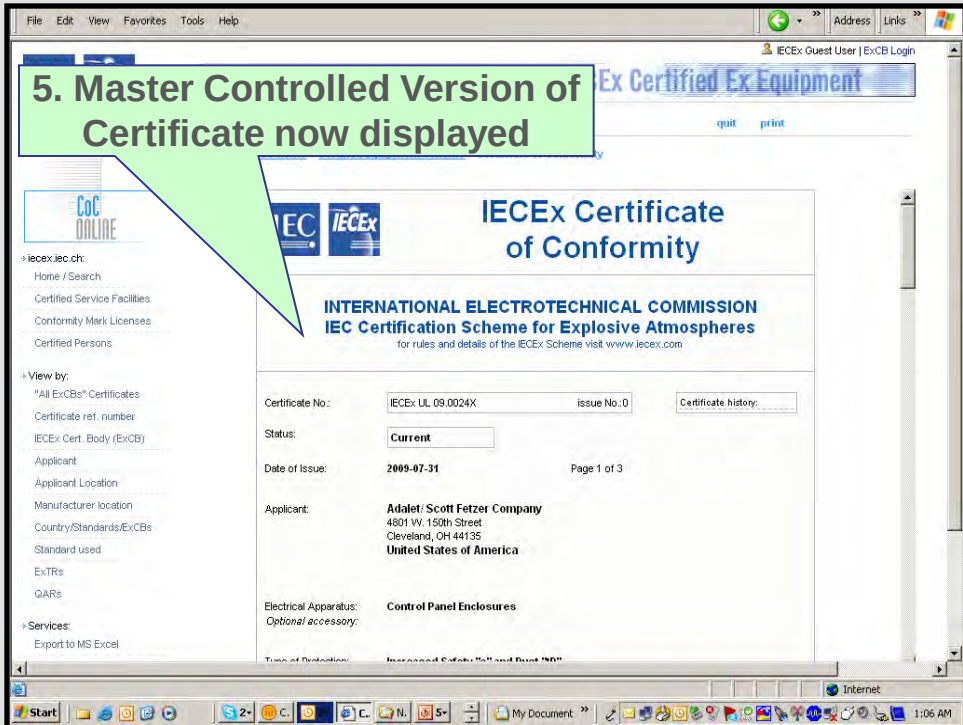


New Scheme for Personnel IECEx 05

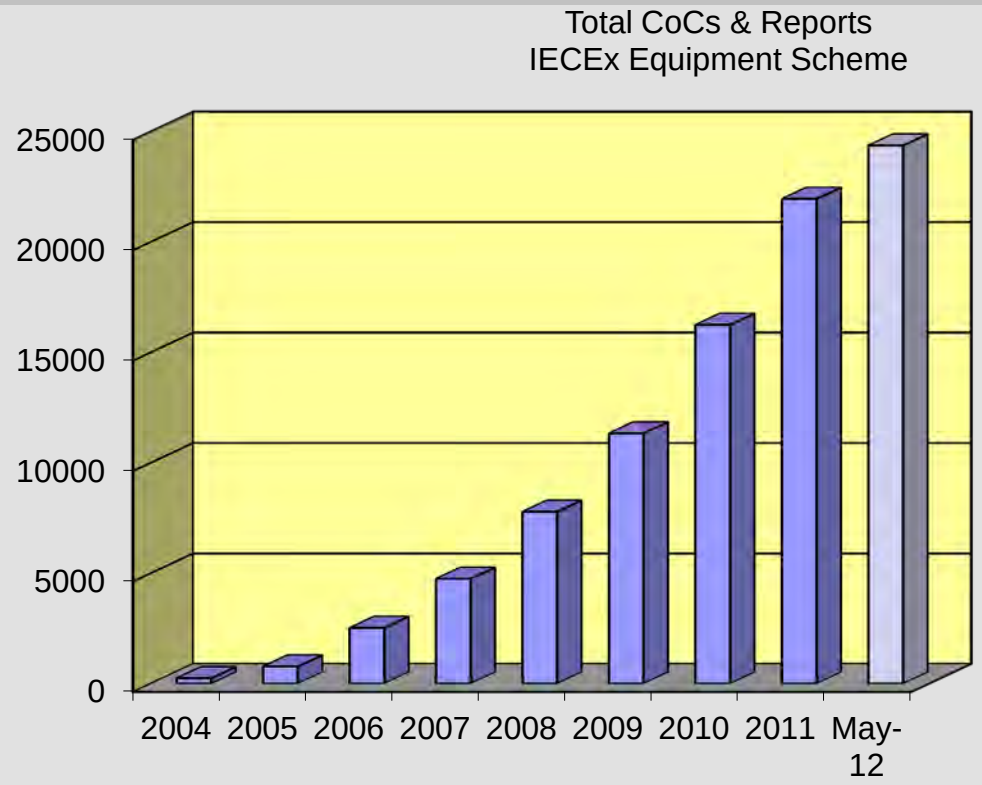

1. Select “Certificate & Licenses”
Information
Publications
Members' Area
Certificates & Licenses
Contact
Home
Certified Ex Equipment
Certified Service Facilities
Certified Persons
Conformity Mark License
View Certificates & Licenses
Latest News:
IEC Lord Kelvin Awards Presentation
First IECEx Conformity Mark License to Vaisala Oyj of Finland
NEK IECEx Symposium programme
Industry Symposium, Melbourne
2. Select “View Certificate & Licenses”

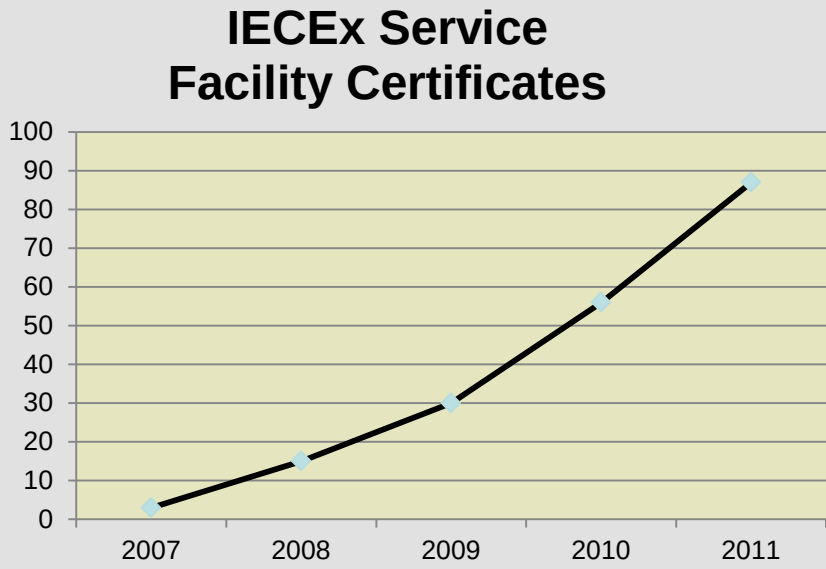

3. Select Type of IECEx Scheme:
- Certified Equipment, or
- Certified Service Provider
- Conformity Mark License, or
- Certified Persons
Certified Equipment Scheme
Certified Equipment
IECEx System :: Certified Service Facility Scheme
Certified Service Facilities
IECEx System :: Conformity Mark License System
Conformity Mark Licenses
IECEx System :: Certified Person Scheme
Certified Persons
(coming soon)


IECEx Certificate of Conformity - Ex Equipment Program - Microsoft Internet Explorer
IECEx Certified Ex Equipment
4. Refer to IECEx OD 011 Part 1 for search and display options


5. Master Controlled Version of Certificate now displayed
IECEx Certificate of Conformity
INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
Certificate No.: IECEx UL 09.0024X
Status: Current
Date of Issue: 2009-07-31
Applicant: Adalet/Scott Fetzer Company
4801 W. 150th Street
Cleveland, OH 44135
United States of America
Electrical Apparatus: Control Panel Enclosures

Some IECEx Statistics





IECEx Certified Persons Certs.	
2010 (commenced Oct)	**6**
2011	**64**
2012 (@July)	**51**
Total	**121**

IECEx Foundation – it's *DNA*

- Being part of IEC: Statutes + Rules
- Industry Based Management Committee
- One single set of Rules and Operational Procedures for TLs + CBs
- ALL TLs and CBs undergo the same qualification process to join, use of peer assessment.
- Common Test Report and Certificate Format used by ALL TLs and CBs but always maintaining CB Brand
- Use of Internet "On-Line" Systems for Certificates. Equipment, Services, Personnel
- Technical Secretariat - Day to Day Management with CEO function

What's Next in IECEx??

- Coverage of Non-Electrical Standards, re IEC SC 31M
- Coverage of other Services within the IECEx Certified Services Scheme
  - Installation
  - Inspection
  - Area Classification
- Maintain Surveillance and Monitoring of the System + ExCBs
- Promotion of IECEx and those Companies, Organisations and Persons that hold IECEx Certification
- Upgraded and enhanced Features on the IECEx Website
- New Smart Phone and Mobile Device Application
  - Streamlined download capabilities to check status of Issued IECEx Certificates
  - An “Off-Line” mode for checking in the field
  - Phase 1 to be launched for IECEx 2012 Calgary

United Nations, via its UNECE Endorses IECEx – WHY?

REGULATORY DIALOGUE AT THE UNITED NATIONS

- To promote trade as a means of development
- To protect the safety of workers and consumers & preserve the natural environment
- To foster the international transfer of knowledge & technology

The United Nations System

UN Principal Organs

- General Assembly
- Security Council
- Economic and Social Council
- Secretariat
- International Court of Justice
- Trusteeship Council[5]

Subsidiary Bodies

Main and other sessional committees
Disarmament Commission
Human Rights Council
International Law Commission
Standing committees and ad hoc bodies

Programmes and Funds

UNCTAD United Nations Conference on Trade and Development
- **ITC** International Trade Centre (UNCTAD/WTO)

UNDP United Nations Development Programme
- **UNCDF** United Nations Capital Development Fund
- **UNV** United Nations Volunteers

UNEP United Nations Environment Programme
UNFPA United Nations Population Fund
UN-HABITAT United Nations Human Settlements Programme
UNHCR Office of the United Nations High Commissioner for Refugees
UNICEF United Nations Children's Fund
UNODC United Nations Office on Drugs and Crime
UNRWA[1] United Nations Relief and Works Agency for Palestine Refugees in the Near East
UN-Women United Nations Entity for Gender Equality and the Empowerment of Women
WFP World Food Programme

Research and Training Institutes

UNICRI United Nations Interregional Crime and Justice Research Institute
UNIDIR[1] United Nations Institute for Disarmament Research
UNITAR United Nations Institute for Training and Research
UNRISD United Nations Research Institute for Social Development
UNSSC United Nations System Staff College
UNU United Nations University

Other Entities

UNAIDS Joint United Nations Programme on HIV/AIDS
UNISDR United Nations International Strategy for Disaster Reduction
UNOPS United Nations Office for Project Services

Related Organizations

CTBTO PrepCom Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization
IAEA[2] International Atomic Energy Agency
OPCW Organisation for the Prohibition of Chemical Weapons
WTO[3] World Trade Organization

Subsidiary Bodies

Counter-terrorism committee
International Criminal Tribunal for Rwanda (ICTR)
International Criminal Tribunal for the former Yugoslavia (ICTY)
Military Staff Committee
Peacekeeping operations and political missions
Sanctions committees (ad hoc)
Standing committees and ad hoc bodies

Advisory Subsidiary Body

UN Peacebuilding Commission

Specialized Agencies[4]

ILO International Labour Organization
FAO Food and Agriculture Organization of the United Nations
UNESCO United Nations Educational, Scientific and Cultural Organization
WHO World Health Organization
World Bank Group
- **IBRD** International Bank for Reconstruction and Development
- **IDA** International Development Association
- **IFC** International Finance Corporation
- **MIGA** Multilateral Investment Guarantee Agency
- **ICSID** International Centre for Settlement of Investment Disputes

IMF International Monetary Fund
ICAO International Civil Aviation Organization
IMO International Maritime Organization
ITU International Telecommunication Union
UPU Universal Postal Union
WMO World Meteorological Organization
WIPO World Intellectual Property Organization
IFAD International Fund for Agricultural Development
UNIDO United Nations Industrial Development Organization
UNWTO World Tourism Organization

Functional Commissions

Crime Prevention and Criminal Justice
Narcotic Drugs
Population and Development
Science and Technology for Development
Social Development
Statistics
Status of Women
Sustainable Development
United Nations Forum on Forests

Regional Commissions

ECA Economic Commission for Africa
ECE Economic Commission for Europe
ECLAC Economic Commission for Latin America and the Caribbean
ESCAP Economic and Social Commission for Asia and the Pacific
ESCWA Economic and Social Commission for Western Asia

Other Bodies

Committee for Development Policy
Committee of Experts on Public Administration
Committee on Non-Governmental Organizations
Permanent Forum on Indigenous Issues
United Nations Group of Experts on Geographical Names
Other sessional and standing committees and expert, ad hoc and related bodies

Departments and Offices

EOSG Executive Office of the Secretary-General
DESA Department of Economic and Social Affairs
DFS Department of Field Support
DGACM Department for General Assembly and Conference Management
DM Department of Management
DPA Department of Political Affairs
DPI Department of Public Information
DPKO Department of Peacekeeping Operations
DSS Department of Safety and Security
OCHA Office for the Coordination of Humanitarian Affairs
OHCHR Office of the United Nations High Commissioner for Human Rights
OIOS Office of Internal Oversight Services
OLA Office of Legal Affairs
OSAA Office of the Special Adviser on Africa
OSRSG/CAAC Office of the Special Representative of the Secretary-General for Children and Armed Conflict
UNODA Office for Disarmament Affairs
UNOG United Nations Office at Geneva
UN-OHRLLS Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States
UNON United Nations Office at Nairobi
UNOV United Nations Office at Vienna

NOTES:

1 UNRWA and UNIDIR report only to the General Assembly.

2 IAEA reports to the Security Council and the General Assembly.

3 WTO has no reporting obligation to the General Assembly (GA) but contributes on an ad-hoc basis to GA and ECOSOC work inter alia on finance and developmental issues.

4 Specialized agencies are autonomous organizations working with the UN and each other through the coordinating machinery of ECOSOC at the intergovernmental level, and through the Chief Executives Board for Coordination (CEB) at the inter-secretariat level. This section is listed in order of establishment of these organizations as specialized agencies of the United Nations.

5 The Trusteeship Council suspended operation on 1 November 1994 with the independence of Palau, the last remaining United Nations Trust Territory, on 1 October 1994.

This is not an official document of the United Nations, nor is it intended to be all-inclusive.

UN- Economic Commission for Europe:-

What UNECE is:

- **Intergovernmental body**
- **Participation by: authorities, regional & int'l organizations, business, standards-setting bodies, certification bodies, test houses, civil society**
- **From all UN Member States**
- **1970 – 2010: 40 years**

UNECE mandate:

- **Forum for dialogue on: ☑ Standardization ☑ Technical regulations ☑ Conformity assessment ☑ Accreditation ☑ Metrology ☑ Market surveillance**

UNECE activities

- **Share info & best practice / Capacity-building**
- **Develop and maintain a set of recommendations**
- **Implement a set of initiatives on specific industrial sectors**

Regulatory Cooperation

- All UN member states may participate, 193
- National regional and international standardization organizations
- UNECE Has observer's status at the meetings of the WTO TBT committee
- Other UN organizations
- International Model for Technical Harmonization - UNECE Recommendation “L” (Development of Common Regulatory Objectives)
- Sectoral Projects
  - Telecoms Equipment
  - Earth Moving Equipment
  - Equipment for Explosive Environments
  - Pipe line Safety

UNECE Sectoral Initiative -Equipment for Explosive Environments

- Industry makes use of IECEx Schemes
- But regulators do not use them in a consistent way
- WP. 6 offers a platform to interact among all stakeholders
- initiative has led to the development and publication of a common regulatory objectives framework using the Regulatory Model L.

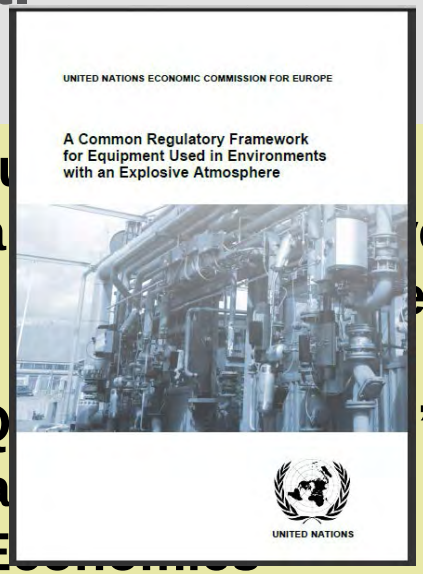
Why is the UN involved in Ex?

- The UN aims at protecting the safety of workers, citizens, consumers
- Repeated testing means that safe and reliable equipment will become unaffordable for some of the countries that need it the most
- The UN promotes the participation of developing countries and countries in transition in international trade
- Barriers to trade are lost opportunities for our membership
- An original initiative from Germany.

The model use of UN CROs:

- Authorities decide to work together on a specific sector
- They agree on CROs (Common Regulatory Objective)
- They transpose the CROs into national technical regulations
- Then, when products have been assessed in the exporting country as compliant with the CROs they can automatically be sold in other markets with no further assessment.

-Removes wastefu
Approvals – usua **e only**
- Enables smaller **ess to**
latest technology
- Prevents Poor Q **”**
- Harmonisation a
Development of E



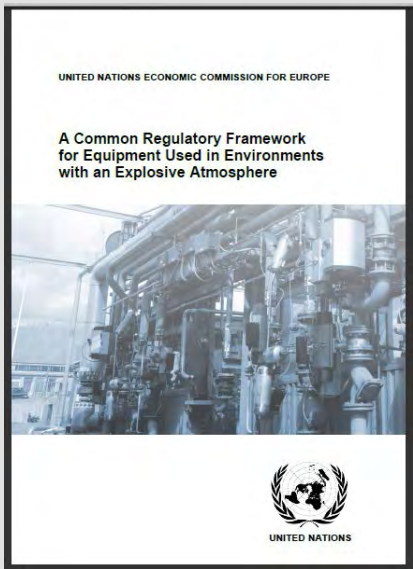
UNECE CRO
Serves as basis for

National or Regional Regulation / Law

Results in Harminisation

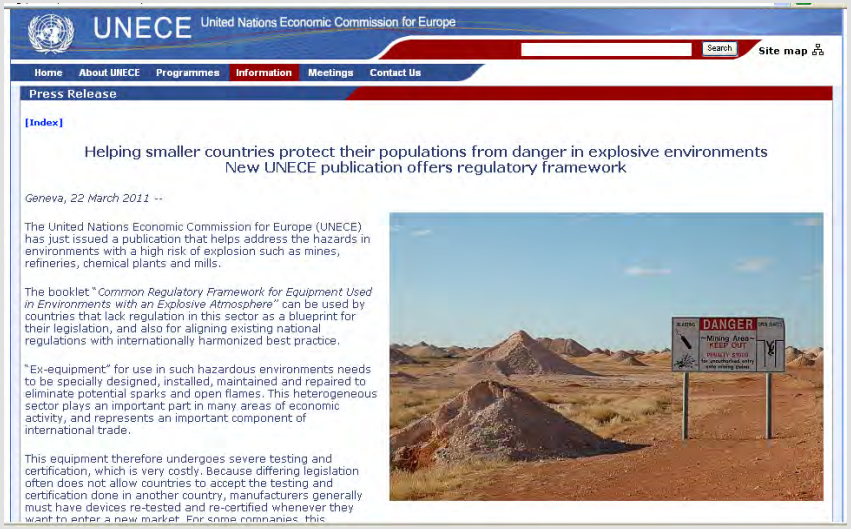
Published UNECE CRO – History
(Common Regulatory Objective)

- Started work in 2007
- Developed a questionnaire about regulatory in Ex on major markets
- Collected replies from Australia, Brazil, the European Union, the Russian Federation, United States
- On the basis of the replies developed CROs
- CROs approved by the Working Party in November 2010, published in March 2011
- Promotion and Awareness of these CROs
- Major Gulf Conference in partnership with IECEx + UAE Standards Authority, March 2012
- UAE now revising existing Regulations
- Other awareness events under planning
- Next UNECE WP6 Ex Mtg Calgary Sept 2012.



United Nations Endorsement of IECEx

New United Nations Publication, March 2011 endorsing IEC TC 31 Standards + IECEx as "world's best practice".


UNECE United Nations Economic Commission for Europe

Search Site map

Home About UNECE Programmes Information Meetings Contact Us

Press Release

[Index]

Helping smaller countries protect their populations from danger in explosive environments
New UNECE publication offers regulatory framework

Geneva, 22 March 2011 --

The United Nations Economic Commission for Europe (UNECE) has just issued a publication that helps address the hazards in environments with a high risk of explosion such as mines, refineries, chemical plants and mills.

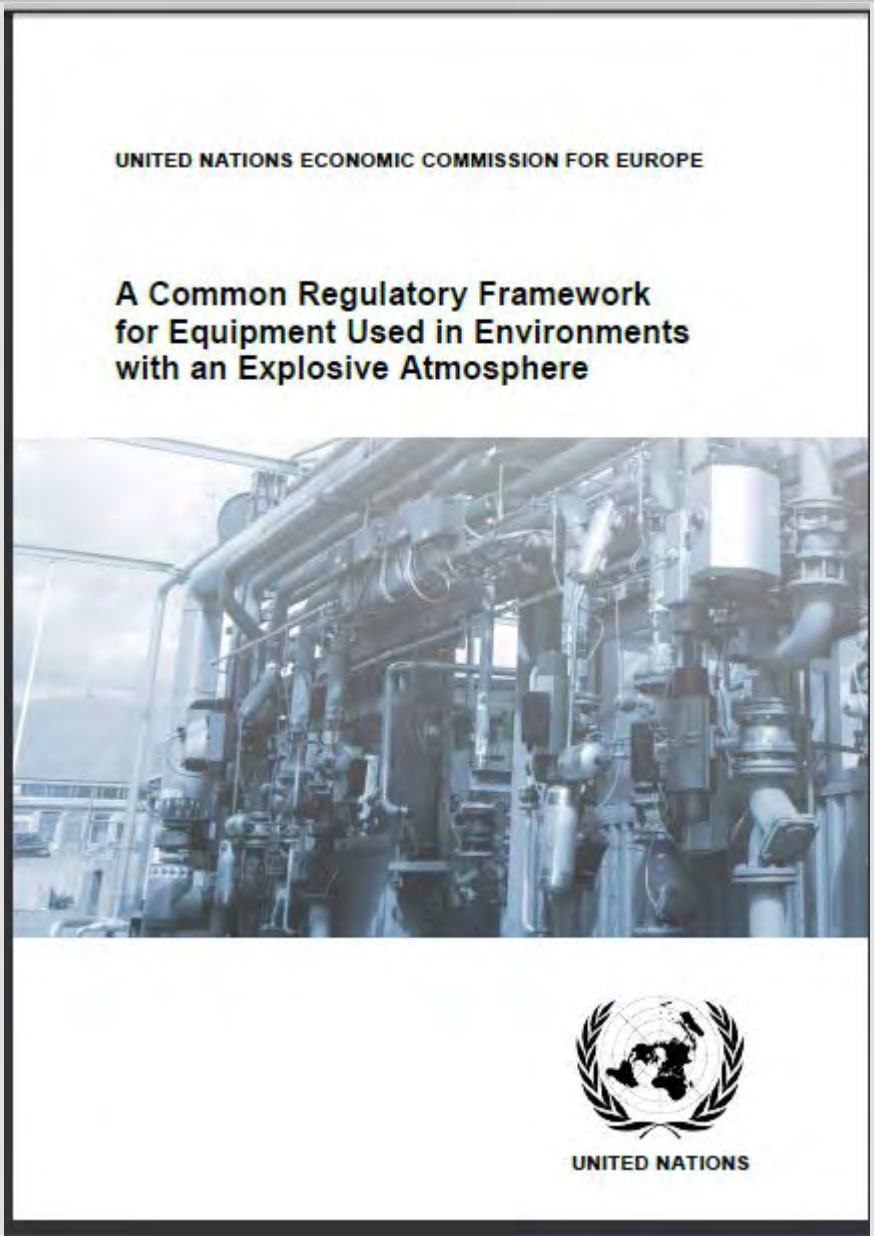
The booklet "*Common Regulatory Framework for Equipment Used in Environments with an Explosive Atmosphere*" can be used by countries that lack regulation in this sector as a blueprint for their legislation, and also for aligning existing national regulations with internationally harmonized best practice.

"Ex-equipment" for use in such hazardous environments needs to be specially designed, installed, maintained and repaired to eliminate potential sparks and open flames. This heterogeneous sector plays an important part in many areas of economic activity, and represents an important component of international trade.

This equipment therefore undergoes severe testing and certification, which is very costly. Because differing legislation often does not allow countries to accept the testing and certification done in another country, manufacturers generally must have devices re-tested and re-certified whenever they want to enter a new market. For some companies, this

Full Text

http://www.unece.org/press/pr2011/11trade_p03e.htm



United Nations CRO Publication - Extract

approach, equipment that complies with the provisions of the standards is "deemed to comply" with the requirements specified in the regulations.

2 Purpose of the Sectoral Initiative on Equipment Used in Environments with an Explosive Atmosphere

7. The purpose of the Sectoral Initiative on Equipment Used in Environments with an Explosive Atmosphere is to promote the convergence of national technical regulations currently in place in this sector towards a shared framework. This will reduce barriers to trade for this equipment, as well as costs. It will also increase the safety of the installations and the well-being of personnel working in the sector, as well as that of the communities living near the installations.

3 Scope statement of the Common Regulatory Objectives contained in this document

8. The Common Regulatory Objectives (CROs) presented in this document have been drawn up in accordance with Recommendation L of the Working Party on Regulatory Cooperation and Standardization Policies (WP. 6) of the United Nations Economic Commission for Europe (ECE/TRADE/378 – UNECE Recommendations on Standardization Policies).

9. The purpose of the CROs is twofold. On the one hand, they can be used as a model to draw up legislative instruments in countries that do not currently have regulations in this sector. On the other hand, they can be used to align existing national regulation with an internationally harmonized best practice.

10. The CROs are drawn up with reference to international standards and conformity assessment procedures developed by IEC and ISO and to best practice in the assessment of conformity to such standards, within the IECEx.

11. The CROs address the requirements both for electrical and mechanical equipment being placed on the market (part one of the present document) and for the safe installation and use of the equipment in the workplace (part two of the present document).

12. Explosion protection in industry can be assured through a variety of legitimate means. The present document is based on one of them, namely, the "IEC Zone Concept, in

provide a translation into a national language.

B. Definition of applicable conformity assessment procedures

22. Compliance with this CROs shall be by use of an international certification scheme such as the IECEx for direct market acceptance of products carrying IECEx Certification. Alternatively, where national legislation does not allow for use of IECEx Certificates, national certification of compliance should be based on IECEx testing and assessments.

Common Regulatory Objectives – Part two
Requirements for the safe use of the equipment

23. All substances intended for use in a plant or facility characterized by an explosive atmosphere have to be classified concerning their safety characteristics by applying the

In Conclusion

While IECEx was formed to serve Industry needs, aimed at

Facilitation of International Trade in Ex Equipment and Services , Through the United Nations UNECE, IECEx is being seen as an ideal platform to achieve the United Nations Principles of:-

- **Promotion of Trade as a means of Development among Countries**
- **Protect safety of Workers and Consumers and preserve Natural Environment**
- **Foster international Transfer of knowledge and technology**

On-going IECEx Activities

- IECEx Services Scheme to cover
  - Installation Services
  - Inspection Services
  - Area Classification Services
- Work on “Ex s” [Special Protection] due to new Standard under development within TC 31
- Preparation for coverage of “Non Electrical” Standards – work underway within IEC SC 31M
- Determination of Life on Component Certificates
- An active IECEx Executive
- Dedicated Business Development WG
- 25 Dedicated WGs across the IECEx System
- Promotion (eg IECEx/UN/ESMA Dubai Conference

IECEx Documentation

www.iecex.com

IECEx Guides

To assist in a common understanding of the aims, objectives and procedures of the IECEx System, the IECEx Secretariat maintains various guidance documents.

The list below provides the official versions of these documents

IECEx 01A An Informative Guide comparing various elements of both IECEx and ATEX	Edition 1 August 2008
IECEx 01B Guidance for the use of the IECEx Logo	Edition 1 October 2011
IECEx 02A Guidance for Applicants seeking IECEx Certification under the IECEx Certified Equipment Scheme, IECEx 02	Edition 2 October 2011
IECEx 03A Guidance for Applications from Service Facilities seeking IECEx Certification, IECEx 03	Edition 1 August 2008
IECEx 04A - Guidance for making applications for and use of IECEx Conformity Mark IECEx 04 (1.7MB)	Edition 1 July 2008
IECEx 05A Guidance and Instructions for Applicants to obtain a Certificate of Personnel Competence (CoPC)	Edition 1 July 2011

Foundation for Ex Safety

- Area Classification
- Select the right Ex Equipment
- Installation + Inspection
- Maintenance + On-going Inspection
- Repair + Overhaul

IECEx is a "Conformity Assessment Tool" providing confidence that Products, Services and Personnel covered by an IECEx Certificate meet specified requirements, (International Standards)

IECEx – Further information

- The IECEx website www.iecex.com
- IECEx Brochure, + Guides http://www.iecex.com/guides.htm

- The IECEx Officers (Executive) http://www.iecex.com/officers.htm
- IECEx 2012 Annual Meetings http://www.iecex.com/calgary/

- Contact any of the listed IECEx Approved Certifiers
  - Equipment Scheme http://www.iecex.com/directory/bodies/bodies1.asp?id=5
  - Services Scheme http://www.iecex.com/directory/bodies/bodies2.asp?id=5
  - Personnel Scheme http://www.iecex.com/directory/bodies/bodies4.asp?id=5

- Presentations from the IECEx 2012 International IECEx nference, Dubai (Highly Recommended) http://www.iecex.com/dubai/index.html
- The IECEx Secretariat (responsible for day to day operational management of the IECEx)

Mr Chris AGIUS

IECEx Executive Secretary

E-mail: chris.agius@iecex.com or info@iecex.com

The End

THANK YOU