

INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) SYSTEM FOR CERTIFICATION TO STANDARDS RELATING TO EQUIPMENT FOR USE IN EXPLOSIVE ATMOSPHERES (IECEX SYSTEM)

Ex Management Committee, ExMC

TITLE: IECEx System Report Card - 2012

INTRODUCTION

The Secretariat has prepared this document as an up date to IECEx Members on the following matters, since the 2011 IECEx Split meetings:

- Membership
- Statistics of issued IECEx Certificates of Conformity, ExTRs, QARs
- A breakdown of Issue 0 compared to Up Issues of CoCs (Table 1B)
- Identification of Mark Licenses issued
- Inclusion of No. of Companies holding IECEx certification (Table 1C)
- Promotional Activities
- Secretariat and General Technical Administration

This document is issued for information to members and is listed on the IECEx 2012 ExMC meeting agenda for noting and any necessary discussion.

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IECEx System Report Card - 2012

1. General Overview

Discussions and decisions from the 2011 series of IECEx Meetings in Split set the tone and direction for further development, growth and expansion of the IECEx System and its Schemes.

The Secretariat is pleased to report on the following key points concerning IECEx operation since the 2011 IECEx Split meetings:

- While at the time of preparing this report, no new countries joined IECEx, interest from various countries has been expressed, namely United Arab Emirates, Ireland, Belgium and Spain, noting that Spain and possibly UAE are attending the 2012 Calgary Meetings and will be finalizing their application.
- New ExCBs and ExTLs being added to the IECEx list of approved bodies
- Operation of the IECEx Certified Service Facilities Scheme, now starting to take traction, with Certificates issued
- Operation of the new IECEx Certificate of Personal Competence, CoPC Scheme also gaining traction with more than 120 Certified Persons showing on the IECEx Website.
- Use of IECEx Unit Verification Certificates
- Promotion of the Publication from the United Nations, UNECE, Common Regulatory Objective for the Ex Sector continues to support IECEx
- Additional enhancements to the IECEx On-Line Certificate of Conformity System, to provide additional tools for ExCB to assist in their management of surveillance activities of issued Certificates
- The marked increase in the demand and issue of IECEx Certificates of Conformity + Reports, as reported in 2008, 2009, 2010 and 2011 continues in 2012 with year on year growth being maintained at levels above 25%
- Continued processing of Scope extensions from ExTLs and ExCBs
- Promotion at Regional and International forums
- Greater industry involvement, including users and regulators
- A marked increase in the number of day to day industry inquiries being directed at the IECEx Secretariat, which is reflected in the increased e-mail traffic of the Secretariat
- Preparation to launch the new "Smart Phone Application"
- Others



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2. <u>Membership</u>

IECEx System Membership, as of 31st July 2012 stands at:

- 30 Countries, members of the IECEx Management Committee, ExMC
- With four separate Certification Schemes
 - IECEx Certified Equipment Scheme (Rules = IECEx 02)
 - IECEx Certified Service Facilities Scheme (Rules = IECEx 03)
 - IECEx Conformity Mark Licensing System (Regulations = IECEx 04)
 - IECEx Certification of Personnel Competencies (CoPC) Scheme (Rules = IECEx 05)
- IECEx Certified Equipment Scheme
 - 47 Approved ExCBs (+ Applicants)
 - 45 Approved ExTLs (+ Applicants)
- IECEx Certified Service Facilities Scheme
 - 12 Approved ExCBs (+ Applicants)
- IECEx Conformity Mark Licensing System
 - 14 Approved License issuing ExCBs
- IECEx Certification of Personnel Competencies (CoPC) Scheme
 - 4 Approved ExCBs (+ Applicants)

3. Statistics - CoCs, QARs, ExTRs (level of IECEx activity)

At 30th July 2012 there were **25,302** Issued IECEx Reports, Certificates and Licenses across all the following Schemes compared with **18,714** for the same time last year (26th July 2011)

- The IECEx Certified Equipment Scheme, IECEx 02 (see Table 1A)
- The IECEx Certified Service Facilities Scheme, IECEx 03. (see Table 2)
- The IECEx Conformity Mark Licensing System, IECEx 04 (see Table 3)
- The IECEx Certification of Personnel Competencies (CoPC) Scheme, IECEx 05
 (see Table 4)

The figure "Totals", in table 1A, show the total number of combined CoCs (Certificates of Conformity), ExTRs (IECEx Test Reports) and QARs (IECQ Quality Audit Reports) issued under the IECEx Certified Equipment Scheme. Table 1B shows a comparison between new Certificates (Issue 0) compared to new issues of existing Certificates (i.e. changes to existing certificates, Issue 1 and above).



In addition, the number of CoCs at the "DRAFT" status, i.e. awaiting completion of the certification process (jobs in hand) as shown in Table 1A stands at **1,150** in the system (compared with **503** for the same time last year) which demonstrates future use of the system. This is in addition to the **25,302** number of Certificates and reports already issued.

Graph 1 provides an overview trend of the number of Certificates and Reports issued since 2003, under the IECEx 02 Scheme (Certified Equipment Scheme), while Graph 2 provides a breakdown of the percentage weighting of CoCs compared to ExTRs and QARs.

The conclusion drawn from these statistics is that the IECEx Certified Equipment Scheme is still experiencing significant and sustained growth. The following factors are seen as facilitating this growth.

- Penetration of new markets, such as the Gulf Region
- Industry's recognition of the value that certification under an Internationally accepted Regime brings to risk mitigation as part of their compliance regime
- The increasing involvement by industry in the management and operation of IECEx
- The credibility of the IECEx System, compliance to IEC Standards, single Peer assessment system for all ExCBs and ExTLs + surveillance;
- Increased awareness and recognition of IECEx as "world's best practice", e.g. the formal endorsement by the UNECE, as per new United Nations approved CRO publication, March 2011
- One set of operational procedures and reporting formats (i.e. the IECEx way of Ex Certification);
- The transparency of IECEx activities, provided by the IECEx website and On-Line CoC system;
- A greater level of industry understanding of the IECEx system by way of promotion of IECEx by IECEx Officers and Members;
- A growing international awareness of the value of Structured International Conformity Assessment Systems such as IECEx;
- The value of Networking among all Ex experts including ExCBs and ExTLs and associated technical discussion forums provided, e.g. ExTAG;
- A dedicated technical Secretariat;
- Others



1A- Total r	1A- Total number of IECEx Equipment CoCs and Reports issued								
Tota	Total number of IECEx Equipment CoCs and Reports issued								
Year	Applicants*	CoCs*	ExTRs*	QARs*	Total*	CoC Drafts			
2003 to 2007	Not recorded	1866	2019	971	4856				
2008	485	1258	1166	350	2774	499			
2009	530	1490	1347	712	3549	618			
2010	510	2070	1897	947	4914	675			
2011	557	2626	2143	966	5735	1000			
2012 (31 Jul)									
Totals	2538	10794	9796	4373	24963	1150			

Table 1 – Year ending Figures IECEx 02 Certified Equipment Scheme

*Figures for the number of Draft certificates each year are NOT included in Totals 21 Unit verification CoC issued since Split meeting

Unit Verification Certificates

Since the 2011 IECEx Split meetings, 21 IECEx Unit Verification Certificates have been issued as at 31 July 2012.

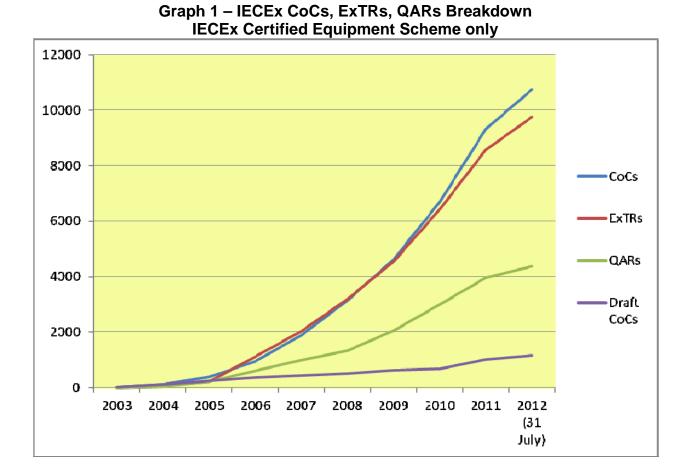
1B – Issue 0 CoCs expressed as % of all CoCs (Equipment Scheme)

Issu	Issue 0 CoCs expressed as % of all CoCs							
Year	All CoCs	lssue 0	0s as % of					
		CoCs	All CoCs					
2008	1258	693	55.09%					
2009	1480	799	53.98%					
2010	2064	1032	50%					
2011	2626	1158	44.09%					
31-Jul-12	1434	645	44.97%					

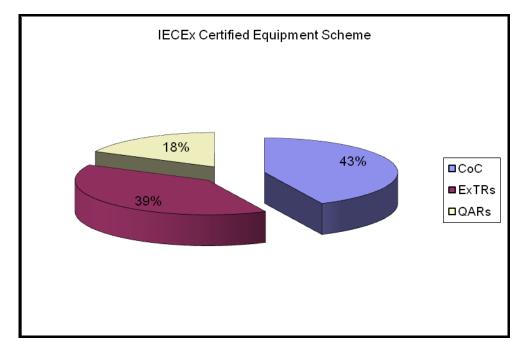


1C – Number of Organisations / Companies (Applicants) holding IECEx Equipment Certificates (Equipment Scheme only)

	2010	2011	2012
	(ExMC/621/R)	(ExMC/699/R)	31 July
Companies Holding IECEx 02 Certificates	1,496	1,932	2,538







Graph 2 – CoCs, ExTRs, QARs Percentages

Graph 3 Total IECEx Equipment CoCs, ExTRs and QARs at Year end to 31 July 2012, Equipment Scheme only

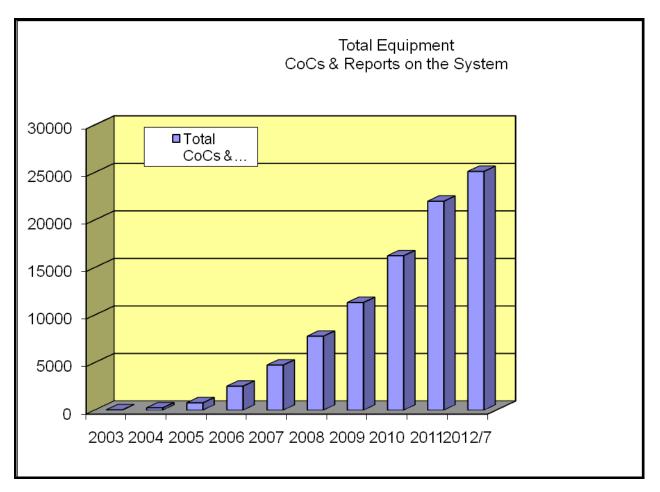






Table 2 – Year End Figures IECEx 03 Certified Service Facilities Scheme

Total number of Certified S	Total number of Certified Services CoCs issued (commenced end 2007)								
Year	CoCs	FARs	Total	Drafts					
2007	3	4	7						
2008	12	15	27						
2009	15	13	28	9					
2010	26	21	47	7					
2011	31	33	64	8					
31 Jul 2012	15	6	21	9					
Totals	102	100	202	9					

Graph 4 Total IECEx Certified Service Facility Certificates (CoC) at Year's end (cumulative) to 31 July 2012

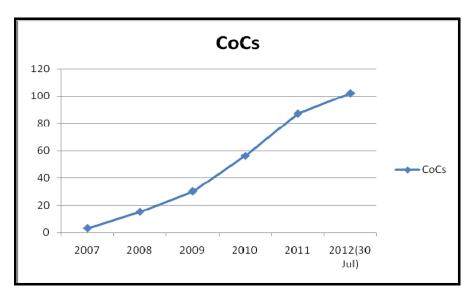


Table 3 – Year End Figures IECEx 04 Conformity Mark Licenses

Total number Conformity mark Licenses issued (commenced 2009)						
Year	Licenses	Number of CoCs attached to Licenses	Drafts			
2009	4	10	0			
2010	3	34	2			
2011	7	83	3			
31 Jul 2012	2	11	8			
Total Current	16	138	8			



Total number CoPC Certificates issued (commenced 2010)						
Year	CoPC Certificates	Drafts				
2010	6	0				
2011	64	0				
31 July 2012	51	0				
Totals	121	0				

Table 4 – Year End Figures IECEx 05 Personnel Competence

4. Surveillance of the IECEx System

To ensure integrity of the System a range of measures and activities are undertaken within IECEx which include:

- a) Peer assessment of all ExTLs and ExCBs seeking to join IECEx
- b) Annual surveillance of all ExTLs and ExCBs (confirmation of accreditation for those with accreditation and site visits for those without accreditation)
- c) Reassessment applied to all ExTLs and ExCBs involving assessment on site to review Testing/Certification facilities, capabilities, practices and review of Certificates, ExTRs and QARs files
- d) Sample reviews of ExTRs, QARs
- e) In-built security features of the IECEx On-Line Certificate system, eg ExCBs can only issue Certificates covering Standards within their scope
- f) IT Tools to aid in the management control of issued ExTRs and QARs and CoCs and FARs, PCARs
- g) On-going surveillance of the On-Line system at the Secretariat
- New IT Feature "Out of Date" QAR listing to assist ExCBs manage and control the on-going surveillance due dates, with Admin feature for the Secretariat to monitor performance of all ExCBs. (see feature below)

In addition, the Secretariat will further report on the surveillance activities during the 2012 ExMC Calgary meeting.

5. IECEx Achievements since 2011 IECEx Split Meetings

Significant achievements since 2011 Split meetings include:

a) Publication of Revised System + Scheme Rules, <u>http://www.iecex.com/rules.htm</u>

<u>IECEx 01</u> IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEx System)



- Basic Rules
- <u>IECEx 02</u> IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEx System) IECEx Certified Equipment Scheme covering equipment for use in explosive atmospheres – Rules of Procedure
- b) New and Updated Publications of IECEx Operational Documents, http://www.iecex.com/operational.htm eg OD 009, OD 017, OD 022, OD 024

Document No.	Title
<u>OD 505</u>	Site Re-Assessment Report for Assessment of IECEx Candidate and Accepted Ex Certification Bodies (ExCBs) for the IECEx 05 Certificate of Personal Competencies Scheme (CoPC)
<u>OD 031</u>	A Guide for Good Working Practices for the Management of the IECEx System's Working Groups
<u>OD 024</u>	IECEx Rules of Procedure covering testing, or witnessing testing at a manufacturer's or user's facility
<u>OD 022</u>	Rules and Procedures for the granting of Licenses to issue and use the IECEx Conformity Mark
<u>OD017</u>	Drawing and documentation Guidance for IEC Ex Certification – for use by Manufacturers and ExTLS
<u>OD 009</u>	IECEx Certified Equipment Scheme, Procedures for the Issuing of IECEx Certificates of Conformity, IECEx Test Reports and IECEx Quality Assessment Reports

c) First International IECEx Conference Jointly conducted with Emirates Authority For Standardisation & Metrology and the United Nations, UNECE <u>http://www.iecex.com/dubai/index.html</u>

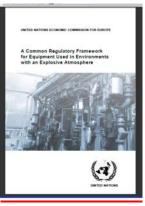




d) First meeting of New IECEx Committee, ExPCC, IECEx Certificate of Personal Competence Scheme Committee, held in Paris June 2012.



 Publication of the United Nations UNECE Common Regulatory Objective (CRO) Publication <u>http://www.iecex.com/unece.htm</u> continues to direct interest towards IECEx.



6. <u>Scheme Promotional Activities</u>

As part of the IECEx promotion and marketing strategy, the following is an account of recent or upcoming promotional activities of the IECEx System:

- Industry presentation by the Secretariat in Vietnam (March 2012)
- Industry presentation by the Secretariat in Kuala Lumpur (May 2012)
- Industry presentation by the Secretariat in Jakarta (May 2012)
- Industry presentation by the Secretariat in Singapore (May 2012)
- Ron Sinclair involvement in presenting at HazardEx events 2012



- Jim Munro presentation at HazardEx Conference 2012
- Chris Agius presentation at HazardEx Conference 2012
- Kerry McManama + Marty Cole, joint Paper IECEx Personnel Certification, PCIC North America
- 2012 March 2 Day IECEx International Conference in Dubai
- Ron Sinclair presentation at Symposium in Nuremberg
- IEC General meeting October 2011- Developing Countries Forum IECEx Chairman Kerry McManama and ExPCC Chairman Ralph Wigg
- Mr Patrick Leroux of TOTAL, training presentations to oil and gas industry
- Lorenza Jachia + Chris Agius, Joint IECEx / UNECE Paper presented at PCIC Europe, Prague 2012 and planned presentation at PCIC Middle East, November 2012
- IECEx Vice Chairman, Alexander Zalogin presentation to EU-Russia Industrialists Round Table Conference scheduled for Kazan (Russia) on 23 October 2012
- ExPCC Chairman Ralph Wigg to facilitate a Workshop at the IEC Young Professionals Forum in Oslo GM
- Monthly news articles in all IEC e-Tech on-line magazines, library maintained at <u>http://www.iecex.com/news_releases.htm</u>
- Others

The above are in addition to the various "local" presentations given by individual IECEx experts.

In addition and with the help of our worldwide IECEx experts, the Secretariat has committed to continue providing an article on IECEx for each monthly issue of the IEC Global Newsletter, e-Tech.

The IECEx Chairman, Officers and Secretariat are available to provide any additional information on these items or assistance with the preparation of any presentations that Members may be involved with.

7 Secretariat and General Technical Administration

- 7.1 Day to day duties of the Technical Secretariat can be broadly categorized as:
 - Processing applications and managing assessments of new bodies and reassessment of existing bodies



- Processing the applications of Scope extensions, e.g. new editions of Standards and other changes, e.g. name changes of existing bodies along with their maintenance via surveillance and re-assessments
- Support to ExCBs in the day to day use of the Centralised On-Line CoC system
- Revision and up dating of IECEx Schemes rules and Operational Documents and forms
- IECEx Schemes development and Growth across all IECEx Schemes
- In conjunction with Chairman and Officers, IECEx System regular reporting to CAB and participation in CAB Working Groups
- Respond to general inquiries from industry
- Day to day management of System finances, in conjunction with Treasurer

7.2 As an indicator of the IECEx System development and growth, since the first Report card issued in 2008 IECEx Paris meetings, the following additional statistics are provided: (Period to July 2012)

General items prepared and issued according to the day to day management and operation of the IECEx System are provided below with a comparison to the figures reported at the 2007, 2008, 2009, and 2010 presented in ExMC/390/Inf, ExMC/461/R, ExMC/544/R, and ExMC/621/R respectively'

ITEM	2007 (ExMC/390/Inf)	2008 (ExMC/461/R)	2009 (ExMC/544/R)	2010 (ExMC/621/R)	2011 (ExMC/699/R)	2012 31 July
Committee Documents						
Prepared and Issued ¹	62	104	136	124	148	152
Operational Documents (new or Revised)	7	5	7	13	13	5
ExTAG Decision Sheets Issued	2	5	1	6	6	6
IECEx Guides (new or Revised)	0	4	0	1	1	3
IECEx Scheme Rules (New or Revised)	0	2	1	3	3	2
Others, e.g. News articles	7	15	11	14	32	23
Total IECEx Items issued ²	78	135	156	161	203	191

¹ Comprises ExMC, ExTAG, ExMarkCo, ExPCC

² Total excludes other items such as reports to CAB and participation in CAB and related Working Groups

7.3 IECEx Website and On-Line Certificate System Upgrades

Since the 2011 IECEx meetings a number of upgrades and improvements to the IECEx website system have been implemented such as:

ExCB Monitoring tool for:-



- Display of ExCBs, QARs out of date
- Display of ExCBs, CoCs, with QARs out of date

See new features below

→ View by: "ITA" Certificates	Quick access: Type in CoC ref. nun
"ITA" Draft Certificates Certificate ref. number IECEx Cert. Body (ExCB)	Free text search: You can use boolea
ExCBs, QARs out of date ExCBs, CoCs with QAR out of date	The IECEx Online Certified Equipment : IECEx Certificat
Applicant Applicant Location	Full Public acce View Statistica
Manufacturer location Country/Standards/ExCBs	Export data to a For any questions, please contact Mr.
Standard used	

<u>On-going:</u>

- Upgrades to deal with issued CoCs where ExCBs change details, e.g. name, logo, address
- Re-arrangement of QARs fields following WG1 + WG5 meeting requests
- Others

7.4 Mobile Device Application for Smart Phones and Pad Devices(iPhone/iPads)

In response to request from users of the IECEx System, seeking ease of access to IECEx Certificates of Conformity, especially while in the field, IEC and IECEx will be launching the IECEx Mobile Application. While a first for IECEx it is also a first for IEC as it enters the "Mobile Applications" Domain.

This new Mobile App. will provide both an On-Line and Off-Line mode for accessing IECEx Certificates with usual search capabilities. The following, are images of the Mobile Application as seen on both an iPhone and iPAD.





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7.5 E-mail Traffic, handled by Secretariat (excluding those dealt with by IECEx Chairman, Officers, WG Conveners, Members and Assessors):

The following level of e-mail traffic was handled by the IECEx Secretariat and does not include additional mails dealt with by the IECEx Chairman, Officers and Assessors. These figures are provided as a guide to IECEx Members of the levels of IECEx activity and show a constant level of e-mails in comparison with 2007, 2008, 2009, 2010, and 2011 figures.

ITEM	2007	2008	2009	2010	2011	2012
	(ExMC/390/Inf)	(ExMC/461/R)	(ExMC/544/R)	(ExMC/621/R)	(ExMC/699/R)	31 July
Total E-mail Traffic of the IECEx Secretariat	16,150	17,500	17,300	18,200	18,880	19,660

* Out of office or other miscellaneous e-mails have been filtered and are excluded from above figures

7.6 Management of IECEx ExCB/ExTL Assessments + Applications for Scope extensions.

ITEM	2007 (ExMC/390/Inf	2008 (ExMC/461/R)	2009 (ExMC/544/R)	2010 (ExMC/621/R)	2011 (ExMC/699/R)	2012 31 July
Site assessments, re-assessments	22	19	17	14	17	23
Scope extensions.	32	32	37	42	89 Standards 1 Unit 43 Applications	81 Standards / Units 38 Applications



8 <u>Finances</u>

8.1 Overview

The sound financial performance of IECEx is reported in the 2011 Audited Accounts, ExMC/741/DV. While income and expenditure are generally according to the approved 2012 Budget, for the first half of 2012, income from IECEx Certificate Fees were above budget expectations while overall expenditure remains within or below budget.

8.2 INVOICES Issued / Processed since 2011 Split meeting

The day to day management of finances for the IECEx system has resulted in the following table of invoices and statements being issued as well as monitoring the receipt of payments

Documents	Reported Berlin 2010	Reported Split 2011	Report for Calgary 2012
Invoices issued – Annual Fees	33	33	33
Statements Issued – CoC Fees	66	71	77
Invoices Issued – CoC Fees	58	63	69
Invoices Issued – Application Fees	1	4	3
Invoices Issued – Assessment Fees	17	17	26
Invoices processed / Central Approval –	33	34	50
Assessor Charges			
TOTAL Invoices issued and processed	208	222	258

In noting the following:

- > overall response to on-time payment of invoices by Members generally good
- income being maintained above 2012 approved budget

There are no specific issues concerning finance at this time. A further update report will be given during the 2012 Calgary ExMC meeting by the Treasurer and Secretary.

9 Concluding Remarks

IECEx continues to enjoy significant and sustained growth in both exposure and demand for its services. The Global Financial crisis has appeared to have little effect on overall demand for IECEx other than to assume that the current annual rate of growth of around +25% perhaps may have even been higher. Despite impressive annual growth IECEx continues to maintain a conservative approach to budgetary planning.

Two significant indicators of annual growth are:

- Growth in number of Certificates + Reports
- Growth in income, mainly from certificate fees stands



The instant and "On-Line" nature of the IECEx Certification system, with its electronic master controlled certificates coupled with the increased industry involvement in the Scheme's operation are seen as a significant drivers of interest and demand for IECEx, noting that Certificates issued by ALL IECEx Certifiers are found in the one single location as opposed to the need to search individual ExCB websites.

The continued growth and success of IECEx is founded on the solid participation by various sectors of industry in the day to day management of the IECEx System via participation in ExMC, its Committees and the various Working Groups. Over recent years we have seen a growing level of this industry participation, especially from end users and also regulators as well as manufacturers and Ex repairers. A key ingredient to the success that the IECEx community continues to enjoy.

The Secretariat acknowledges, with gratitude, the diligent leadership of the IECEx Chairman supported by the IECEx Executive along with Conveners of the many expert Working Groups and their experts all of which are vital to enable IECEx to continue in its quest to serve the international Ex community.

Chris Agius IECEx Executive Secretary August 2012