



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

Title: Scope Extension Assessment Report for Certification Management Limited, CML, GB, an Accepted ExCB and ExTL within the IECEx System, Equipment Scheme 02

To: Members of the IECEx Management Committee, ExMC

# Introduction

Recently document ExMC/1112/DV was issued for voting by members concerning a scope extension request which was assessed during the mid-term site assessment visit.

However, since issue of ExMC/1112/DV the secretariat has become aware that, while the assessment report covered the three Standards ISO 80079-36 and -37 along with IEC 60079-33, the cover page and associated voting form omitted to mention IEC 60079-33.

This updated version of the report and voting form, known as ExMC/1112A/DV, now includes specific reference to IEC 60079-33 and therefore replaces ExMC/1112/DV. There are no other changes included in this updated report.

To process an application for a scope extension from CML, GB, during the mid-term assessment a special site assessment visit was carried out and conducted for the inclusion of the following Standards within their scope -

**ISO 80079-36** Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements

**ISO 80079-37** Explosive atmospheres - Part 37: Non-electrical equipment for explosive atmospheres - Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"

IEC 60079-33 Explosive atmospheres – Part 33: Equipment protection by special protection "s"

This report details the assessment findings of this scope extension along with the recommendation for the acceptance of the above scope extension. It is now hereby submitted for voting by ExMC.

Please consider the report and return the completed voting form, separate Word document, to **the Secretariat** by **2016 06 15** 

Your speedy response to the voting process will be very much appreciated.

#### **IECEx Secretariat**

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# IEC System for certification to standards relating to equipment for use in Explosive Atmospheres (IECEx System)

# **IECEx Assessment Report Form**

IECEx Assessment Report Form for use by IECEx Assessment Teams to report Assessments conducted according to the IECEx Assessment Procedures of

- a) Operational Document IECEx OD 003-2 for the Certified Equipment Scheme
- b) Operational Document IECEx OD 016 for the Certified Service Facility Scheme
- c) Operational Document IECEx OD 022 for the IECEx Conformity Mark Licensing System

IECEx ExCB/ExTL	assessment repo	rt for Certifi	cation Manag	gement
Limited	-			-

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION



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#### 1 Assessment information

# 1.1 Type of Body covered by this assessment: <retain appropriate marks>

ExCB for IECEx Certified Equipment Scheme	✓
ExTL for IECEx Certified Equipment Scheme	✓
ExCB for IECEx Certified Service Facilities Scheme	
ExCB for IECEx Conformity Mark Licensing System	

NOTE 1 ExCB - IECEx Certification Body

NOTE 2 ExTL - IECEx Testing Laboratory

# 1.2 Type of assessment: <retain appropriate marks>

Pre-assessment for candidate body	
Initial assessment for candidate body	
Surveillance	
Re-assessment	
Scope extension	✓

#### 1.3 Details of body

# 1.3.1 Country

UK

#### 1.3.2 Name of body

**Certification Management Limited** 

# 1.3.3 Name and title of nominated principal contact

Name	Title	E-mail address
Mike Shearman	Managing Director	Mike.shearman@cmlex.com

# 1.4 Assessment information

#### 1.4.1 Members of the assessment team

Name	Role (modify as necessary)
Ron Webb	Lead Assessor

This scope extension assessment was undertaken during the mid-term assessment visit of CML

It should also be known that the Lead Assessor, Mr Ron Webb has been intimately involved in the preparation of the new non electrical standards as well as a member ExMC WG15 (non electrical expert Working Group).

# 1.4.2 Place(s) of assessment

Unit 1 Newport Business Park	
New Port Road	
Ellesmere Port	
Cheshire	
CH65 4LZ	



#### 1.4.3 Assessment date

10-11 March 2016

#### 1.5 Scope

# 1.5.1 Additional Standards for ExCB scope for IECEx 02 equipment certification scheme

Number	Title
ISO 80079-36 Edition 1 (2016)	Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements
ISO 80079-37 Edition 1 (2016)	Explosive atmospheres - Part 37: Non-electrical equipment for explosive atmospheres - Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"
IEC 60079-33 Edition 1	Explosive atmospheres – Part 33: Equipment protection by special protection "s"

#### 1.5.2 Additional Standards for ExTL scope for IECEx 02 equipment certification scheme

Number	Title
ISO 80079-36 Edition 1 (2016)	Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements
ISO 80079-37 Edition 1 (2016)	Explosive atmospheres - Part 37: Non-electrical equipment for explosive atmospheres - Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"
IEC 60079-33 Edition 1	Explosive atmospheres – Part 33: Equipment protection by special protection "s"

#### 1.5.3 Test equipment

CML do not have the equipment to carry out the charging tests specified in Annex D of ISO 80079-36. This will result in an exclusion of this test from the scope

#### 2 Common information

# 2.1 Legal entity of body

Not relevant as this is a scope extension assessment. This was covered in the assessment reported in  $ExMC/965/DV\_CML\_ExTL$ .

#### 2.2 Financial support

Not relevant as this is a scope extension assessment. This was covered in the assessment reported in  $ExMC/965/DV\_CML\_ExTL$ .

#### 2.3 History

Not relevant as this is a scope extension assessment. This was covered in the assessment reported in  $ExMC/965/DV\_CML\_ExTL$ .



#### 2.4 Documentation

#### 2.4.1 Quality manual

The ExHaz manual issue 9 was viewed and found to include reference to OD233 for Ex 's' in Section 6. See also Section 2.11

The process meets the requirements of the IECEx

#### 2.4.2 Procedures

While covered in the assessment reported in ExMC/965/DV\_CML\_ExTL, it was confirmed that the procedures also cover the new Standards listed under the scope extension request.

#### 2.4.3 Work instructions

While covered in the assessment reported in ExMC/965/DV\_CML\_ExTL, it was confirmed that the procedures also cover the new Standards listed under the scope extension request.

#### 2.4.4 Records (including test records where relevant)

Not relevant as this is a scope extension assessment. This was covered in the assessment reported in ExMC/965/DV\_CML\_ExTL.

#### 2.4.5 Document change control

While covered in the assessment reported in ExMC/965/DV\_CML\_ExTL, it was confirmed that the procedures also cover the new Standards listed under the scope extension request.

#### 2.5 Confidentiality

Not relevant as this is a scope extension assessment. This was covered in the assessment reported in ExMC/965/DV\_CML\_ExTL.

#### 2.6 Publications (Hard cover and Electronic)

Not relevant as this is a scope extension assessment. This was covered in the assessment reported in  $ExMC/965/DV\_CML\_ExTL$ .

# 2.7 Recognition and agreements

Not relevant as this is a scope extension assessment. This was covered in the assessment reported in  $ExMC/965/DV\_CML\_ExTL$ .

#### 2.8 Internal audit and periodic management review

While covered in the assessment reported in ExMC/965/DV\_CML\_ExTL, it was confirmed that the procedures also cover the new Standards listed under the scope extension request.

#### 2.9 Contracting, subcontracting, use of other labs and use of other locations

No subcontracting is used for the standards considered in this report

#### 2.10 Training and competence

There is a competency matrix for the IECEx Scheme. Interviews were undertaken with staff to ensure that they had the required level of understanding. These are included in a TCD



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document which is held by the Secretariat. Training records for each staff member are held on an Intranet system and are very comprehensive.

#### 2.11 Ex s

#### 2.11.1 Involvement in Standards making process

CML are members of BSI committee EXL/031 Equipment for explosive atmospheres (looking after standards for electrical Ex equipment) and are in the process of applying for membership of BSI committee EXL23 Explosion and fire precautions in industrial and chemical plant (looking after standards for non-electrical Ex equipment). CML circulate documents internally and make comment back to the committee where relevant. As such they meet the requirements in OD 233 to be involved in the standards making process.

#### 2.11.2 Independent Verifiers

CML have identified several staff members and outsource agents as Independent Verifiers. These persons are listed in the Technical Capability Document and interviews were held with three of them. They all had good understanding of Ex protection concepts but realised that some equipment could still afford an adequate level of explosion safety but not by direct compliance with the standards. Ways of using existing concepts or variations to existing concepts were seen as a way of being used for Ex s. The methods to be applied to a potential Ex s project were discussed. Two of the three staff members interviewed had directly utilised the EHSRs of the ATEX Directive to issue a formal ATEX EC-Type Examination Certificate in their previous employment in another UK Ex Notified Body / IECEx CB. They all understood the need to carry out an Ignition Hazard Assessment prior to identifying the measures to be taken to provide Ex protection. All the listed Independent Verifiers were considered appropriate. Independent Verifiers will be notified to the Secretariat on a project by project basis for agreement from the Executive

# 2.12 Complaints and appeals (including appeals to IECEx)

Not relevant as this is a scope extension assessment. This was covered in the assessment reported in  $ExMC/965/DV\_CML\_ExTL$ .

#### 2.13 Special facts to be noted

#### 2.13.1 Supporting documentation

Copies of additional supporting information for this assessment have been provided to the applicant and the IECEx Secretariat. These are included in a site assessment report and include:

Completed technical capability document (TCD)

#### 2.14 Recommendations

Based on the assessment performed on 10 and 11 March 2016, CML is recommended for scope extension to include the Standards listed in 1.5 in the IECEx scheme as:

- An ExCB in the IECEx Certified Equipment Scheme
- An ExTL in the IECEx Certified Equipment Scheme

Ron Webb Lead Assessor

Date: 11 March 2016



# 3 ExCB for IECEx Certified Equipment Scheme

#### 3.1 Assessment references

- a) IECEx02 IECEx Certified Equipment Scheme covering equipment for use in explosive atmospheres Rules of Procedure
- b) OD003-2 Assessment, surveillance assessment and re-assessment of ExCBs and ExTLs operating in the IECEx 02, IECEx Certified Equipment Scheme
- c) OD005-1 IECEx Quality System Requirements for Manufacturers Part 1: Guidance on the establishment and maintenance of a quality system
- d) OD005-2 IECEx Quality System Requirements for Manufacturers Part 2: Audit Checklist. (This is available in a Word format for use by ExCBs)
- e) ISO/IEC 80079-34 Edition 1, Explosive atmospheres Part 34: Application of quality systems for equipment manufacture
- f) OD009 Issuing of CoCs, ExTRs and QARs
- g) IECEx Document OD 025 Guidelines on the Management of Assessment and Surveillance programs for the assessment of Manufacturer's Quality Systems in accordance with the IECEx Scheme
- h) OD0026 IECEx Certified Equipment Scheme Guidelines for the qualification of Lead Auditor and Auditors, in accordance with the IECEx System
- i) ISO/IEC 17065, General requirements for bodies operating product certification systems
- j) IECEx Document OD17 Drawing and documentation guidance
- k) IECEx Technical Capability Document (TCD)
- I) ExTAG decision sheets (DSs)

NOTE The latest editions of the above documents were applied

#### 3.2 Candidate ExCB persons interviewed

Name	Position
Mike Shearman	Managing Director
Dave Stubbings	Technical Director
Helen Amos	Technical Manager
Neil Hughes	Principal Engineer

#### 3.3 Associated ExTL(s)

The ExCB is integral with the ExTL

#### 3.4 Associated certification functions

While covered in the assessment reported in ExMC/908/DV\_CML\_ExCB, it was confirmed that the procedures also cover the new Standards listed under the scope extension request.

#### 3.5 National marks and certificates

Not relevant as this is a scope extension assessment. This was covered in the assessment reported in ExMC/908/DV\_CML\_ExCB.

#### 3.6 Standards accepted in scope extension

See clause 1.5 of this report



#### 3.7 National differences to IEC standards

National differences to IEC standards are those for the European differences listed in the latest version of the IECEx Scheme Bulletin.

#### 3.8 Organisation

#### 3.8.1 Names, titles and experience of the senior executives

Name	Title	Experience
Mike Shearman	Managing Director	29 years

#### 3.8.2 Name, title and experience of the quality management representative

Name	Title	Experience
Mike Shearman	Managing Director	29 years

#### 3.8.3 Name and title of signatories for certification

Name	Title	Comments
Mike Shearman	Managing Director	
David Stubbings	Technical Director	

#### 3.8.4 Other employees in ExCB activity

Name	Title	Responsibility and Experience in Ex
Helen Amos	Technical Manager	8 years

#### 3.9 Organizational structure

Included in the Site Assessment Report

#### 3.10 Administration

#### 3.10.1 Administrative structure

Included in the Site Assessment Report

# 3.10.2 Indemnity insurance

Not relevant as this is a scope extension assessment. This was covered in the assessment reported in ExMC/908/DV\_CML\_ExCB.

# 3.11 Resources

Adequate staffing resources were available

#### 3.12 Committees (such as governing or advisory boards)

Not relevant as this is a scope extension assessment. This was covered in the assessment reported in  $ExMC/908/DV\_CML\_ExCB$ .



#### 3.13 Certification operations

#### 3.13.1 National approval/certification methods

Not relevant as this is a scope extension assessment. This was covered in the assessment reported in ExMC/908/DV\_CML\_ExCB.

#### 3.13.2 Certification policy

Not relevant as this is a scope extension assessment. This was covered in the assessment reported in ExMC/908/DV\_CML\_ExCB.

#### 3.13.3 Application for certification

While covered in the assessment reported in ExMC/908/DV\_CML\_ExCB, it was confirmed that the procedures also cover the new Standards listed under the scope extension request.

#### 3.13.4 Certification decision

While covered in the assessment reported in ExMC/908/DV\_CML\_ExCB, it was confirmed that the procedures also cover the new Standards listed under the scope extension request.

#### 3.13.5 Suspension and cancellation of certificates

Not relevant as this is a scope extension assessment. This was covered in the assessment reported in ExMC/908/DV\_CML\_ExCB.

#### 3.14 Certificates issued

Number of certificates issued in the last 2 years for each type of protection

Standard numbers	Type of protection or other identifying information	_
		Total
EN 13463-xx	Non-electrical equipment (ATEX Certificates)	15
IEC 60079-33	Ex s (ATEX EHSR Certificates)	0

#### 3.15 National accreditation

National accreditation for the standards involved in this scope extension will be made. Pending this accreditation, annual surveillance may be required

#### 3.16 Assessment of manufacturers and issue of QARs

CML already carry out QAN assessments to ATEX for non-electrical equipment. This will extend to cover QARs.

#### 3.17 Comments (including issues found during assessment)

The staff interviewed had a good understanding of the non-electrical standards in the EN13463-xx series. These were used as a basis for development of ISO 80079-36 and ISO 80079-37. They also had a good understanding for Ex s (see 2.11)

A review of previous files relating to the EN 13463 series revealed that CML staff are well versed and have a full understanding of the assessment approaches for non-electrical equipment for Ignition Hazard Assessments



# 4 ExTL for IECEx Certified Equipment Scheme

#### 4.1 Assessment references

- a) IECEx02 IECEx Certified Equipment Scheme covering equipment for use in explosive atmospheres Rules of Procedure
- b) IECEx OD003-2 Assessment, surveillance assessment and re-assessment of ExCBs and ExTLs operating in the IECEx 02, IECEx Certified Equipment Scheme
- c) IECEx OD009 Issuing of CoCs, ExTRs and QARs
- d) ISO/IEC 17025:2005 Edition 2, General requirements for the competence of testing and calibration laboratories
- e) IECEx Document OD17 Drawing and documentation guidance
- f) IECEx Technical Capability Document (TCD)
- g) ExTAG decision sheets (DSs)

NOTE The latest editions of the above documents were applied.

#### 4.2 Candidate ExTL persons interviewed

Name	Position
Dave Stubbings	Technical Director
Helen Amos	Technical Manager
Neil Hughes	Principal Engineer
Harriet Davies	Certification Engineer

#### 4.3 Associated ExCB(s)

The ExCB is integral with the ExTL

# 4.4 Organisation

#### 4.4.1 Names, titles and experience of the senior executives

Name	Title	Experience
Mike Shearman	Managing Director	29 years

# 4.4.2 Name, title and experience of the quality management representative

Name	Title	Experience
Mike Shearman	Managing Director	29 years

#### 4.4.3 Other employees in ExTL activity

Name	Title/responsibility	Experience in Ex
17 additional staff		
members		

#### 4.5 Organizational structure

Included in the Site Assessment Report



#### 4.6 Resources

Adequate staff resources are available

CML do not have the equipment to carry out the charging tests specified in Annex D of ISO 80079-36.

This will result in an exclusion of this test from the scope

#### 4.7 Test reports issued

Number of test reports (ExTRs) issued under for the preceding four years for each type of protection.

Standard numbers	Type of protection or other identifying information	
		Total
EN 13463-xx	Non-electrical equipment (ATEX Certificates)	13
IEC 60079-33	Ex s (ATEX EHSR Certificates)	0

#### 4.8 National accreditation

National accreditation for the standards involved in this scope extension will be made. Pending this accreditation, annual surveillance may be required

#### 4.9 Calibration

While covered in the assessment reported in ExMC/965/DV\_CML\_ExTL, it was confirmed that the procedures also cover the new Standards listed under the scope extension request.

# 4.10 Comments (including issues found during assessment)

The staff interviewed had a good understanding of the non-electrical standards in the EN13463-xx series. These were used as a basis for development of ISO 80079-36 and ISO 80079-37. They also had a good understanding for Ex s (see 2.11)

It is further acknowledged that CML are an active ExTL with an extensive scope of acceptance, refer to IECEx OD 001, Therefore are in possession of the necessary test equipment and resources to undertake tests according to ISO 80079-36 and 80079-37 with the exclusion of the tests of Appendix D

#### 5 Annexes

There are no annexes associated with this report.