



ExMC/517A/DV
July 2009

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

Title: Operational Document Ex OD 502 Application for Personnel
Competencies documentation and information requirements

Circulated to: IECEx Management Committee, ExMC

INTRODUCTION

Draft Document **ExMC/517/CD** was prepared by ExMC WG12 during its February 2009 meeting and submitted to ExMC members for comment in March 2009. Comments received from members were collated and circulated as document ExMC/529A/CC.

ExMC WG12 held a further 3 day meeting in Singapore during 23 – 25 June 2009 to consider the comments and necessary changes to the document.

This document, ExMC/517A/DV incorporates the changes determined during the Singapore WG12 meeting and sets out the documentation and information requirements for applications for Personnel Competency Certification, OD 502. Refer to ExMC/529B/Inf for WG12 responses to comments.

This document is issued to ExMC for final approval. Please submit your vote to the IECEx Secretariat by **21st August 2009** using the following voting form.

The results of the voting will be reported during ExMC Melbourne 2009 September Meeting. Therefore we seek your assistance for return of the vote by the due date.

Main changes to ExMC/517/CD incorporated in this updated version, ExMC/517A/DV include:

- Clarification of requirements for photos, Clause 3.3.5
- Review of Typical Application Form Annex A
- Formatting and style changes.

Chris Agius

IECEx Secretariat

Address:
SAI Global Building
286 Sussex Street
Sydney NSW 2000
Australia

Contact Details:
Tel: +61 2 8206 6940
Fax: +61 2 8206 6272
e-mail: chris.agius@iecex.com
<http://www.iecex.com>



IECEx Operational Document

**IECEx Scheme for Certification of Personnel Competencies
for Explosive Atmospheres**

Ex OD 502

**Application for Personnel Competencies, documentation and
information requirements**

INTERNATIONAL ELECTROTECHNICAL COMMISSION

IECEx OPERATIONAL DOCUMENT**IECEx Scheme for Certification of
Personnel Competency for Explosive Atmospheres****Ex OD 502 Edition 1.0****Application for Personnel Competencies,
documentation and information requirements**

This Operational Document sets out requirements for an individual person making application for a Certification of their Competency.

OD 502 specifies the minimum requirements of knowledge and skills that an individual must meet as a prerequisite for making application for assessment. The details in this document are intended to provide guidance for the preparation of the necessary evidence to be provided to demonstrate that the minimum level has been attained.

Document History

Date	Summary
2009 XX	Original Issue (Edition 1)

Address:

IECEx Secretariat
286 Sussex Street
Sydney NSW 2000
Australia

Tel: +61 2 8206 6940
Fax: +61 2 8206 6272
Email: chris.agius@iecex.com

INTRODUCTION

This IECEx Operational Document details information and documentation requirements for applications from individuals for an IECEx Certification of Personnel Competencies.

Competency of personnel working in explosive atmospheres is necessary. The potential for accidents in Ex areas is increased if personnel are not competent for the activities with which they are involved. The need for competency is included in many legal documents (legislation), but is often not clearly defined.

Competency depends on knowledge, skill, experience and training. Measurement of competency is a difficult task and requires specific assessment methods. Competency needs to be maintained so periodic monitoring of a Certified Persons performance is required. This may require additional documentation being provided to the ExCB on occasions.

CONTENTS

<u>INTRODUCTION</u>	1
1 Scope	5
2 Scope of Certification	5
2.1 Unit of Competency	5
2.2 Language of Certificate	6
2.3 Limitation of Scope	6
2.3.1 Types of Protection	6
2.3.2 Product types	6
2.3.3 Groups	7
2.3.4 Voltages	7
2.3.5 Other limitations	7
2.4 Evidence of education and training	7
2.4.1 General Qualifications not specific to Explosive Atmospheres	7
2.4.2 Documentation Specific to Explosive Atmospheres	7
2.5 Work experience both Hazardous and Non-Hazardous Areas	7
2.5.1 Work Experience in or associated with Non-Hazardous Areas	7
2.5.2 Work Experience in or associated with Hazardous Areas	8
2.5.3 Validation	8
3 Application form	8
3.1 Application Form	8
3.2 Personal details of the applicant	8
3.3 Details to be provided	9
3.3.1 Name	9
3.3.2 Private Address	9
3.3.3 Telephone contact & email	9
3.3.4 Date of Birth	9
3.3.5 Photograph	9
4 Recertification	9
Annex A Typical Application Form	10

INTERNATIONAL ELECTROTECHNICAL COMMISSION

IECEx OPERATIONAL DOCUMENT

IECEx Scheme for Certification of Personnel Competency for Explosive Atmospheres

OD 502

Application for Personnel Competencies, documentation and information requirements

1 Scope

This Operational Document describes the documentation and information required for an application by an individual to an ExCB for an IECEx Certificate of Personnel Competency [CoPC] and to maintain Certification.

This operational document must be read in conjunction with the Rules of this IECEx Certification Scheme given in IECEx 05 and the other relevant Operational Documents, OD 503 – ExCB Procedures for issuing and maintaining IECEx Certificates of Personnel Competency and OD 504 – Specification for Units of Competency Assessment Outcomes.

2 Scope of Certification

2.1 Unit of Competency

The applicant is to detail the Units of Competency for which they wish to be assessed. The selection is from those competencies listed in OD 504 and currently are:

- Unit Ex 001 - Apply basic principles of protection in explosive atmospheres
- Unit Ex 002 - Perform Area 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 in or associated with Hazardous Areas
- Unit Ex 007 – Perform Visual & Close Inspections of Electrical Equipment in or associated with Hazardous Areas
- Unit Ex 008 - Perform Detailed Inspection of Electrical Installations in or associated with Hazardous Areas
- Unit Ex 009 - Design Electrical Installations in or associated with Hazardous Areas
- Unit Ex 010 – Perform Audit Inspection of Electrical Installations in or associated with Hazardous Areas

2.2 Language of Certificate

The applicant will advise if the certificate is to be additionally supplied in a language other than English. The translation requirements are the responsibility of the ExCB.

2.3 Limitation of Scope

The applicant may, in conjunction with the ExCB, request a restriction of the scope of the Certificate of personnel Competency according to the requirements given in 2.3.1 to 2.3.5. Unless otherwise stated, the scope of the Certificate of Personnel Competency will include all aspects of the standards and no restrictions will apply. The applicant will be assessed according to all the requirements of the Unit of Competency being requested.

2.3.1 Types of Protection

If the nature of the work is restricted to specific types of protection then they are to be nominated and listed on the certificate. The assessment will be restricted only to the required outcomes of the Unit of Competency for these types of protection.

The types of protection permitted to be nominated are:

- "d": flameproof enclosure,
- "e": increased safety,
- "i": intrinsic safety,
- "m": encapsulation,
- "n": non-sparking,
- "o": oil immersion,
- "p": pressurization,
- "q": powder filling,
- "t": protection by enclosure,
- Optical Radiation
- Gas Detection

2.3.2 Product types

If the nature of the work is restricted to specific product types then they are to be nominated and listed on the certificate. The assessment will be restricted to only the required outcomes of the Unit of Competency for these product types.

The product types permitted to be nominated are:

- Rotating machines,
- Switchgear,
- Instrumentation,
- Communication equipment,
- Heating equipment,
- Trace heating,
- Power Transformers

2.3.3 Groups

Where the application is not intended to extend to all forms of hazardous material they may be restricted to one or a combination of:

Group I: Mines subject to firedamp

Group II: Explosive Gas Atmospheres

Group III: Explosive Dust Atmospheres

2.3.4 Voltages

Where the applicant does not have the appropriate qualifications and experience to work with all voltages then the restricted range of voltages permitted shall be shown on the Certificate of Personnel Competency.

2.3.5 Other limitations

During the assessment process the ExCB may determine that there are other limitations that should apply to the application. In this case the ExCB shall discuss with the applicant the limitation to be applied and ensure it is clearly shown on the Certificate of Personnel Competency.

2.4 Evidence of education and training

2.4.1 General Qualifications not specific to Explosive Atmospheres

The evidence provided will demonstrate the level of technical education [or equivalent] attained, relevant to the application, through documents such as Degree, Diploma, College Certificates, Trade tests and Professional Institute recognition etc. Copies of these documents shall be provided in the original language and in the language required by the ExCB. The applicant shall be responsible for any translations and provide the contact details of the organisations that issued the document.

2.4.2 Documentation Specific to Explosive Atmospheres

Documents demonstrating any training undertaken on subjects and topics relevant to the Explosive Atmospheres Unit of Competency applied for shall be provided. These documents may be Certificates issued by an independent organisation or trade association or may be a formal internal programme of training set by and endorsed/countersigned by the relevant employer. Copies of these documents shall be provided in the original language and in the language required by the ExCB. The applicant shall be responsible for any translations and provide the contact details of the organisations that issued the document.

2.5 Work experience both Hazardous and Non-Hazardous Areas

2.5.1 Work Experience in or associated with Non-Hazardous Areas

A brief résumé will be provided in a chronological order with latest experience first. The résumé should provide details of the Employer, type of industry, position and responsibility. Sufficient information should be provided to enable an evaluation of the basic underlying concepts expected for the applicable Unit of Competency.

Work experience may require a restriction relating to product types. In this case the resume will need to specifically identify these aspects.

2.5.2 Work Experience in or associated with Hazardous Areas

A resume will be provided in a chronological order with latest experience first.

Sufficient information shall be provided identifying:

- Employer and Type of industry
- Position and responsibility within these organisations
- Protection Techniques used
- Standards & Codes of Practice used
- Duties undertaken
 - Hazardous Area Classification
 - Installation and Circuit Design
 - Equipment selection
 - Equipment installation
 - Equipment inspection
 - Equipment maintenance
 - Equipment testing and commissioning
 - Equipment repair

Work experience may require a restriction relating to both types of protection and product types. In this case the resume will need to specifically identify these aspects.

2.5.3 Validation

Validation of the work experience may be provided by employers or clients.

It is essential that validation can be provided for those Units of Competency the Applicant wishes to be assessed against. Contact details for the employers or clients must be provided for validation. The Certifying Body shall assess which validation methodology shall be used based on the review of the information provided.

3 Application form

3.1 Application Form

The applicant shall obtain a copy of the official application form from the ExCB to which they wish to make application.

In preparing the application the applicant shall specifically note the available competencies given in 2.1 and any limitation of scope as detailed in 2.3.

Annex A contains a sample application form for guidance.

3.2 Personal details of the applicant

The applicant shall provide sufficient personal detail to ensure they can be correctly identified. There shall be sufficient evidence to show that the person conducting the work is the same as identified on the Certificate of Personnel Competency. The certified person shall notify the issuing ExCB of any change to these details.



3.3 Details to be provided

The details given in 3.3.1 to 3.3.5 shall be provided:

3.3.1 Name

The family name and all given names in full are to be provided.

3.3.2 Private Address

The full address at which the person normally resides. In addition the applicant is to advise the address to be used for any correspondence.

3.3.3 Telephone contact & email

A telephone number and/or email address. This will be used for all contact during the processing of the application (until the Certificate is issued). This information will be used on by the ExCB and anyone acting on behalf of the ExCB processing the application. This information will not be made available to any other party.

3.3.4 Date of Birth

Evidence to be sighted by the ExCB in the form of a birth certificate, passport or affidavit.

3.3.5 Photograph

Passport size portrait photograph which is current and at least passport quality and with a white background. This is to be updated at each ongoing assessment. The photograph is to be supplied with the application form or in electronic .jpg format 150*200 pixels.

4 Recertification

Updated information relating to Clause 3 will be required by the ExCB at the time of recertification.

Annex A

Typical Application Form

APPLICATION FOR CERTIFICATE OF PERSONNEL COMPETENCY This form is used as a basis for an application for a new certificate / renewal of certificate			
To be sent to		<input type="checkbox"/> New certificate	<input type="checkbox"/> Renewal / change / of certificate or recertification of certificate no.:
(ExCB address)		Applicant name and postal address	
Applicant employer & postal address		Email address	Date of birth dd/mm/yyyy
License number (where applicable)		Telephone Cell phone	Telefax
Invoice address		Units of competency (Ex 001)	Limitations regarding types of protection, product types, groups and voltages
See attachments for additional information regarding education, training and experience			
DECLARATION I am aware of and familiar with the requirements for the IECEx Certificate of Personnel Competency. Should my application for certification be accepted, I understand that these requirements shall be fulfilled. I declare that I will comply with existing requirements for the IECEx CoPC Scheme, will not misrepresent the scope of certification and agree to pay the expenses in connection with my application. I have no current application pending with any other ExCB.			
		Date	
		Applicants signature	