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

**IECEx ASSESSMENT REPORT**

**Title: Assessment Report for the Initial Assessment of** **Laboratorio Oficial Jose María de Madariaga (LOM), Spain, to become an Accepted Ex Certification Body (ExCB) in the IECEx 05 Scheme - Certification of Personnel Competencies (CoPC)**

**Introduction**

This document provides a Report from the IECEx Assessment Team for the acceptance of Laboratorio Oficial Jose María de Madariaga (LOM), Spain, to become an Accepted Ex Certification Body, ExCB, within the IECEx 05 Scheme, Certification of Personnel Competencies (CoPC).

ExMC Members are requested to consider this Report and the recommendation of the IECEx Assessment Team for the acceptance of Laboratorio Oficial Jose María de Madariaga (LOM), Spain, as an ExCB in the IECEx 05 Scheme.

***This document is hereby submitted for ExMC approval via correspondence using the IECEx on-line voting system.  ExMC Members are requested to submit their vote via the IECEx On-line*** [***Ballot System***](https://www.iecex.com/ballot) ***by the closing date 2024 01 05***

***Please refer to OD 050 for guidance on the “IECEx On-line voting system.”***

***Chris Agius***

**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, F-003

IECEx assessment report form for use by IECEx assessment teams to report assessments conducted according to the relevant IECEx assessment procedures of:

Operational Document IECEx OD 003-2 for the Certified Equipment Scheme

Operational Document IECEx OD 316-\* for the Certified Service Facility Scheme

Operational Document IECEx OD 422 for the IECEx Conformity Mark Licensing Scheme

Operational Document IECEx OD 501 for the Personnel Competence Scheme

IECEx ExCB/ExTL/ATF assessment report for

Laboratorio Oficial Jose María de Madariaga (LOM)

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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# Assessment information

## Type of body covered by this assessment:

<Check appropriate boxes>

|  |  |
| --- | --- |
| ExCB for IECEx Certified Equipment Scheme | [ ]  |
| ExTL for IECEx Certified Equipment Scheme | [ ]  |
| ATF for IECEx Certified Equipment Scheme | [ ]  |
| ExCB for IECEx Certified Service Facilities Scheme | [ ]  |
| ExCB for IECEx Conformity Mark Licensing System | [ ]  |
| ExCB for IECEx Certification of Personnel Competency Scheme | [x]  |

NOTE 1 ExCB - IECEx Certification Body

NOTE 2 ExTL - IECEx Testing Laboratory

 NOTE 3 ATF - Additional Testing Facility

## Type of assessment:

|  |  |
| --- | --- |
| Pre-assessment for candidate body | [ ]  |
| Initial assessment for candidate body | [x]  |
| Surveillance  | [ ]  |
| Re-assessment  | [ ]  |
| Scope extension | [ ]  |

## Details of body

### Country

Spain

### Name of body

Laboratorio Oficial Jose María de Madariaga (LOM)

### Name and title of nominated principal contact

|  |  |  |
| --- | --- | --- |
| Name | Title | E-mail address |
| Natalia Vazquez | General Coordinator | natalia.vvinuela@upm.es |

## Assessment information

### Members of the assessment team

|  |  |
| --- | --- |
| Name  | Role  |
| Marino Kelava | IECEx Lead Assessor |

### Place(s) of assessment

|  |  |
| --- | --- |
| LOM | C/ Eric Kandel, 1 (Tecnogetafe)28906 Getafe (Madrid) Spain |

### Assessment date(s)

The IECEx Peer Assessment of LOM for compliance with the IECEx CoPC requirements as an ExCB was conducted as on-Site assessment of their examination center in Madrid with technical interviews of key staff located there, including examiners 27th and 28th of June 2023

## Application information and background information on the assessment

This is the Initial assessment of Scheme 05 ExCB. Candidate body applied for Units of competence as defined in IECEx OD 504 (Unit Ex 000, Ex 001 and Ex 002).

LOM themselves are not accredited to ISO/IEC 17024. In noting that compliance with ISO/IEC 17024 is a requirement of the IECEx CoPC Scheme, re IECEx 05, holding national accreditation to ISO /IEC 17024 is not. However, for Bodies that do not hold accreditation to ISO/IEC 17024, the IECEx Assessment Team is required to conduct a full assessment to the ISO/IEC 17024 requirements as part of the IECEx peer assessment, using the IECEx OD 507 Checklist.

LOM has previously been accepted as ExCB and ExTL for IECEx Scheme 02.

Therefore, the IECEx assessment of LOM included a full assessment of ISO/IEC 17024 using the IECEx OD 507 checklist and report. The completed ISO/IEC 17024 checklist (OD 507) is retained by the Secretariat. To this point, the Assessment Team were able to conclude compliance with ISO/IEC 17024.

For this assessment, the IECEx Assessment Team was led by Mr Marino Kelava, IECEx Lead Assessor.

## Scopes

### ExCB scope for equipment certification scheme

This Application by LOM was limited to the IECEx 05, CoPC Scheme, hence this section is outside the scope of this assessment.

### ExTL scope

This Application by LOM was limited to the IECEx 05, CoPC Scheme, hence this section is outside the scope of this assessment.

### ATF Scope

This Application by LOM was limited to the IECEx 05, CoPC Scheme, hence this section is outside the scope of this assessment.

### ExCB scope for Service Facilities Scheme

This Application by LOM was limited to the IECEx 05, CoPC Scheme, hence this section is outside the scope of this assessment.

### ExCB scope for Conformity Mark Licensing Scheme

This Application by LOM was limited to the IECEx 05, CoPC Scheme, hence this section is outside the scope of this assessment.

### ExCB scope for IECEx Personnel Competence Scheme

The scope for the IECEx Personnel Competence Scheme is shown below.

| Unit  | Comments |
| --- | --- |
| Unit Ex 000 – Basic knowledge and awareness  | [x]  |  |
| Unit Ex 001 – Apply basic principles of protection in explosive atmospheres | [x]  |  |
| Unit Ex 002 – Perform classification of hazardous areas | [x]  |  |
| 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 explosive atmospheres | [ ]  |  |
| Unit Ex 007 – Perform visual & close inspection of electrical installations in or associated with explosive atmospheres | [ ]  |  |
| Unit Ex 008 – Perform detailed inspection of electrical installations in or associated with explosive atmospheres | [ ]  |  |
| Unit Ex 009 – Design electrical installations in or associated with explosive atmospheres | [ ]  |  |
| Unit Ex 010 – Perform audit inspection of electrical installations in or associated with explosive atmospheres | [ ]  |  |

# Common information

## Legal entity of body

The Certification Body LOM is a public centre, being part of the Technical University of Madrid, Spain (Universidad Politecnica de Madrid, UPM), which was established in 1979 following the proposal by the Ministry of Industry of Spain.

As an independent organization under the legal entity of the Technical University of Madrid, LOM has its own settlement account and seal used for testing and certification activities. The General Director of LOM is nominated by UPM. The most recent royal decree which includes a history of the official development of LOM as a legal entity was reviewed. This was Royal Decree 334/1992, of April 3, ‘which approves the Regulation of the Official Laboratory "José María de Madariaga". Article 13 of the Royal decree establishes the right of LOM to operate with the foundation of the University as the legal entity. This legal registration is valid with no time limitation.

## Financial support

LOM is a self-supporting and non-profit organization without financial support from the government, although it may receive funds from the government for projects. The body relies on fees charged to applicants and clients for product certification, testing and other services. Other services may include the technical assistance contracts with the government.

## History

As noted above, LOM was founded in 1979 as part of UPM Spain. At the national level, LOM is the Spanish Official Laboratory and Control Body in the fields of mining, explosives for civil use and pyrotechnics having testing laboratories for mining equipment, equipment for use in potentially explosive atmospheres, flammable solids and oxidizing substances, pyrotechnic and explosives articles, fertilisers, gas detectors, gas equipment, and dangerous goods transport.

LOM’s main activity is in the field of testing and certification, in which LOM has been the official laboratory to develop the conformity assessment procedures of the national regulations in the fields of mining, explosives and pyrotechnics since 1979. Under the European ATEX Directive 2014/34/EU, LOM has been appointed as Notified Body Nº 0163 to act in the same fields that it is involved with for national regulations. Currently LOM is also an accepted European Notified body for Directive 2014/28/EU for the placing on the market and supervision of explosives for civil uses, Directive 2013/29/EU for the placing on the market of pyrotechnic articles, and Regulation (EU) 2019/1009 on the making available on the market of EU fertilising products. Since 2008, LOM has become one of the eleven reference bodies specified in the United Nations Manual of Test and Criteria. In addition, LOM also acts as an assessment body and technical assistant to the Spanish Ministry regarding safety projects in ATEX, mining, explosives and pyrotechnics.

## Documentation

### Quality manual

The Quality Manual current Rev.50 sets out the description of all the major requirements for the certification body and refers to further procedures (PGRA-nn\_n) containing the details of the processes used to provide all aspects for the services to be delivered.

In addition, LOM operates to document PIECEX 02/Rev.1 “LOM requirements in IECEx Certification of Personnel Competence Scheme” as their Operational Manual for activities associated with the IECEx CoPC Scheme.

Quality Manual current Rev.50 at the time of the assessment and PIECEX 02/Rev.1 were reviewed and found to meet IECEx requirements.

### Procedures

There are 7 relevant procedures identified with PGRA series numbers. All these procedures are referenced by the Quality Manual.

MANUAL DE CALIDAD Rev. 50

PGRA 5 1 Operativa del control de la documentación del sistema Rev. 15

PGRA 11 1 Tratamiento de las no conformidades, acciones correctivas y preventivas Rev. 8

PGRA 11 2 Relaciones con clientes y tratamiento de reclamaciones Rev. 11

PGRA 13 1 Gestión y archivo de documentos Rev. 5

PGRA 14 1 Preparación, desarrollo e Informe de las auditorías internas de la calidad Rev. 18

PGRA 15 1 Formación y cualificación del personal Rev. 27

In addition to 6 above, there is a dedicated procedure PIECEX 02/Rev.1 “LOM requirements in IECEx Certification of Personnel Competence Scheme”, which is specific to the IECEx operation as an ExCB in Scheme 05. Application forms, evaluation records, authorities and responsibilities are referred to in this procedure.

The procedures are maintained on LOM’s internal network with controlled access rights.

The assessment team reviewed these procedures and found them to meet IECEx requirements.

### Work instructions

LOM applied for limited scope in IECEx Scheme 05 (Units 000 to 002). There are no work instructions applicable to this certification scheme at LOM. All relevant requirements are contained in dedicated procedures.

### Records (including test records where relevant)

Procedure PIECEX 02 “LOM requirements in IECEx Certification of Personnel Competence Scheme” Clause 10.1 addresses the retention of documents and states that the period of retention of documents is specified in Chapter 13 of the Quality Manual, being a period not less than 10 years. There is also a procedure for records, PGRA 13-1 “Documents management and archive”.

All records are treated as confidential quality records and subject to the above provisions.

The assessment team reviewed the performance of record keeping and found it to meet IECEx requirements.

### Document change control

Documentation change control is addressed in the following documents:

* PGRA 05-1 “System documentation control”.
* PIECEX 02 “LOM requirements in IECEx Certification of Personnel Competence Scheme”.

The procedures were reviewed and found to meet IECEx requirements.

## Confidentiality

Requirements for confidentiality are contained in Chapter 1.6 of the Quality Manual and in IECEx-LOM-CoPC Rev.1 “LOM IECEx certification procedure for CoPC (Guidance for the applicants)”. There are also signed confidently agreements for staff and members of the Certification Committee.

Confidentiality is also ensured through:

• controlled limited access to process documentation from the moment of submission to certification up to the archiving stage,

• records of documentation created in the certification and supervision process,

• archiving evidence of assessment and any candidate documentation provided during the process.

Assessment Team sighted examples of completed and signed agreement forms.

## Communication with public and customers (Hard copy and Electronic)

LOM advertises its services at its website [www.lom.upm.es](http://www.lom.upm.es). For its IECEx operation under certification of personnel competence scheme, LOM has developed IECEx-LOM-CoPC Rev.1 “LOM IECEx certification procedure for CoPC (Guidance for the applicants)”, including the information on application of IECEx certification, confidentiality, complaints etc. The document is available for release to potential clients is planned to be available on the LOM’s website once accepted by the IECEx Management Committee.

## Recognitions and agreements

LOM operates as IECEx Scheme 02 ExCB and ExTL and as a European Notified Body for the following Directives:

* Directive 2014/34/EU: Equipment and protective systems intended for use in potentially explosive atmospheres.
* Directive 2014/28/EU to the making available on the market and supervision of explosives for civil uses.
* Directive 2013/29/EU to the making available on the market of pyrotechnic articles.
* Regulation (EU) 2019/1009 on the making available on the market of EU fertilising products.

## Internal audit

Internal audit is addressed in procedure PGRA 14-1 “Preparation, developing and reporting of internal quality system audits”. Procedure captures operations related to the IECEx CoPC Scheme. This was reviewed and found to meet IECEx requirements.

The last internal audit took place on 16 June 2023.

## Management review

The requirements for management review are contained in Chapter 2.5 of the Quality Manual.

The last management review took place on 15 February 2023.

The assessment team assessed this process and found to meet IECEx and ISO/IEC 17024 requirements.

## Contracting, subcontracting and witness testing

### Contracting

LOM does not use any contractors for their certification work for IECEx.

### Subcontracting

LOM does not subcontract any activity related to certification of personnel competence scheme.

### Off-site and Witness testing

This Application by LOM is limited to the IECEx 05, CoPC Scheme, hence this section is outside the scope of this assessment.

## Training and competence

Details of staff competencies are included in the site assessment report.

Training and competence are addressed in chapter 2 of PIECEX 02 “LOM requirements in IECEx Certification of Personnel Competence Scheme”, supported by the procedure PGRA 15-1 “Personnel qualification”.

There is a competency matrix addressing all units’ part of the proposed scope. Details of staff competencies are stored in personal files.

LOM maintains staff training records along with a Competency Matrix record that identifies persons, their competence and roles within the IECEx CoPC Operations. As reported in 1.4.3 above, this assessment included detailed technical interviews with LOM’s Examiner Staff.

Interview was used to evaluate the competence of nominated persons for their technical subject knowledge, as well as that of the Standard(s) and IECEx CoPC Scheme requirements. These evaluations served as confirmation that the process and criteria used by LOM to identify, evaluate and appoint staff, especially technical staff, to ensure that competent staff are engaged in the IECEx CoPC certification process.

Procedures were noted and reviewed to address:

- Examiner and Assessor required profiles

- Recruitment process of Examiners and Assessors

In conclusion the assessment team determine that the Training and Competence framework of LOM meets IECEx requirements.

## Complaints and appeals (including appeals to IECEx)

Complaints and appeals are addressed in PGRA 11-2 “Relations with customers and complaints management”. The specific information is included in IECEx-LOM-CoPC Rev.1 “LOM IECEx certification procedure for CoPC (Guidance for the applicants). The applicant, the certificate holder or other parties have the right to appeal in writing to the decision made by LOM at each stage of the certification process or within the certificate validity period. All appeals and complaints are considered at LOM in accordance with the principle of protection of interests of the client.

These were reviewed and found to meet IECEx requirements.

## Impartiality

Impartiality is addressed in Chapter 1.6 of the Quality Manual. The committee to preserve LOM’s impartiality is addressed in IMP-LOM-CI “Procedure for the composition and functioning of the Committee for safeguarding LOM’s impartiality”. The Risk Analysis document provides an assessment of factors that may affect Impartiality.

In addition to the above, to ensure there are no conflicts of interest, LOM requires all its employees, both internal and external, to report any former and/or present connections with the candidate, the examination of which they will be assigned to. If there are any such connections, LOM assesses the risk in terms of threats to impartiality, and either resigns from involving this staff into the examination process or proves that there is no conflict of interests. All staff and Impartiality Committee have signed regarding impartiality, honesty and confidentiality of their work.

These have been reviewed by the assessment team and found to meet IECEx requirements.

## Active involvement in development of Decision Sheets

Procedure PIECEX 02/Rev.1 includes a commitment of LOM to comply with the IECEx CoPC Rules and Operational Documents including participating in the process for the development and use of ExPCC Decision Sheets according to OD 508.

A member of staff is delegated to manage this process. He organises feedback on draft DSs on which they have an opinion.

This has been reviewed by the assessment team and found to meet IECEx requirements.

## Special facts to be noted

LOM are not accredited as complying with ISO/IEC 17024, hence the IECEx Assessment conducted a thorough and complete assessment to the requirements of ISO/IEC 17024 and at the conclusion of this assessment confirms that sufficient evidence was gathered to show ISO/IEC 17024 requirements are met. Details of this assessment and the completed OD 507 checklist are retained at the Secretariat.

The assessment team appreciated the commitment and support of the management and staff of LOM for the IECEx assessment process.

## 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 or provided separately and include:

* Details of issues raised and how these have been resolved
* Completed Checklist for ISO/IEC 17024 (OD 507)
* Photos of the facilities
* Information on competencies
* Site Assessment Report (Form F-004) with Assessors’ notes
* Other

## Recommendations

Based on the assessment performed over the period listed in 1.4.3 above, LOM is recommended for acceptance in the IECEx scheme as:

* An ExCB in the IECEx Certification of Personnel Competency Scheme

This is according to the scope listed in this document.

In noting, LOM’s technical capability for conducting examinations and assessments, this recommendation for acceptance as an ExCB in the IECEx 05 CoPC Scheme is on the basis that a surveillance assessment is conducted not more than 12 months after acceptance to confirm full implementation of the newly developed management system to meet ISO/IEC 17024 and IECEx requirements.

|  |
| --- |
| Marino Kelava |
| IECEx Lead Assessor |

Date: 23rd August 2023

# ExCB for IECEx Certified Equipment Scheme

This Application by LOM was limited to the IECEx 05, CoPC Scheme, hence this section is outside the scope of this assessment.

#  ExTL for IECEx Certified Equipment Scheme

# This Application by LOM was limited to the IECEx 05, CoPC Scheme, hence this section is outside the scope of this assessment.

# ATF for IECEx Certified Equipment Scheme

# This Application by LOM was limited to the IECEx 05, CoPC Scheme, hence this section is outside the scope of this assessment.

# ExCB for Certified Service Facilities Scheme

# This Application by LOM was limited to the IECEx 05, CoPC Scheme, hence this section is outside the scope of this assessment.

# IECEx Conformity Mark Licensing Scheme

# This Application by LOM was limited to the IECEx 05, CoPC Scheme, hence this section is outside the scope of this assessment.

# ExCB for IECEx Personnel Competence Scheme

## Assessment references

1. IECEx 05 IEC System for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEx System) IECEx Scheme for Certification of Personnel Competence for Explosive Atmospheres – Rules of Procedure
2. IECEx OD 501 IECEx Scheme for Certification of Personnel Competence for Explosive Atmospheres – Assessment procedures for IECEx acceptance of Certification Bodies (ExCBs) for the purpose of issuing and maintaining IECEx Certificates of Personnel
3. IECEx OD 503 IECEx Scheme for Certification of Personnel Competence for Explosive Atmospheres - ExCB Procedures for issuing and maintaining IECEx Certificates of Personnel Competencies
4. IECEx OD 504 IECEx Scheme for Certification of Personnel Competence for Explosive Atmospheres – Specification for Units of Competence Assessment Outcomes
5. IECEx OD 505 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)
6. IECEx OD 506 - Guidance on the use of the IECEx Certificates of Personnel Competence Scheme’s Assessment Question Bank by ExCBs IECEx OD 060 IECEx Guide for Business Continuity – Management of Extraordinary Circumstances or Events Affecting IECEx Certification Schemes and Activities
7. ISO/IEC 17024 Conformity assessment — General requirements for bodies operating certification of persons
8. IECEx OD 507 Check list for assessment to ISO/IEC 17024
9. ExPCC Decision Sheets

Additional references applied for this assessment

Site Assessment Report Form F-004

## Candidate ExCB persons interviewed

|  |  |
| --- | --- |
| Name | Position |
| Natalia Vázquez Viñuela | General Coordinator |
| María Teresa López Marín | Quality Manager |
| Juan Carlos Sancho Rojas | Examiner |
| Sergio Domene Ciruelos | Examiner |
| Yohan Echeverri Díaz | Examiner |

The above key staff were all interviewed with the assessment team confirming sufficient knowledge and experience with additional details held as confidential.

## National certificates

LOM is ATEX Notified Body in Europe, however, they do not officiate as a Certification Body of Personnel Competence at national level

## Organisation

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

|  |  |  |
| --- | --- | --- |
| Name | Title | Experience (years) |
| Javier García Torrent | General Director | More than 40 years in Ex field |
| Natalia Vázquez Viñuela | General Coordinator | More than 20 years in Ex field |

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

|  |  |  |
| --- | --- | --- |
| Name | Title | Experience (years) |
| Alejandro Coto Villa | Head of ATEX Installations Area | More than 20 years in Ex field |

### Name and title of signatories for certification

|  |  |  |
| --- | --- | --- |
| Name | Title | Comments |
| Javier García Torrent | General Director / Certification Committee | More than 40 years in Ex field |
| Natalia Vázquez Viñuela | General Coordinator / Certification Committee | More than 20 years in Ex field |

### Other employees in ExCB activity

|  |  |  |
| --- | --- | --- |
| Name | Title/responsibility | Experience in Ex (years) |
| Juan Carlos Sancho Rojas | Examiner | More than 20 years in Ex field |
| Sergio Domene Ciruelos | Examiner | More than 5 years in Ex field |
| Yohan Echeverri Díaz | Examiner | More than 5 years in Ex field |

## Organizational Structure

Annex B shows the overall organisation structure of LOM. Annex C shows the organisation of the ExCB.

## Indemnity insurance

LOM has an insurance policy for professional indemnity and public liability covering all the activities of testing laboratory, certification body, inspection body, control body, notified body, and government projects. Indemnity insurance policy issued by Catalana Occidente with appropriate amount and worldwide coverage was sighted during the assessment. It is valid till 7th of April 2024.

## Resources

LOM has the necessary resources of competent staff and appropriate procedures to operate as a certification body.

From the IECEx assessment, the Assessment Team concluded that LOM are well equipped with examination facilities covering both theoretical examinations and practical exams for their scope to meet IECEx CoPC Scheme requirements.

The assessment team conducted a review of these facilities, including an on-site assessment and found these to meet IECEx requirements to enable a thorough examination and assessment according the IECEx 05 CoPC requirements of OD 503 and OD 504.

The facilities are supported by a compliment of both technical and administrative staff to enable LOM to function as a well-resourced Certification Body.

Further details of Facilities, staff interviewed and photos of facilities are included in the site assessment report, Report Form F004, held at the Secretariat.

## Committees (such as governing or advisory boards)

LOM has established an independent Impartiality Committee addressed in IMP-LOM-CI “Procedure for the composition and functioning of the Committee for safeguarding LOM’s impartiality”. Its purpose is to provide the LOM with advice on issues affecting impartiality, together with openness and public perception. They meet regularly on annual basis. Last meeting was in February 2023.

The assessment team were satisfied with the governance structure as meeting ISO/IEC 17024 and IECEx requirements.

## Certification operations

### National approval/certification Methods

LOM does not officiate as a national Certification Body for personnel competences, but has directed its efforts to become an IECEx Certification Body to issue IECEx CoPC Certificates.

### Certification policy

LOM has a certification quality policy which is included in IECEx-LOM-CoPC Rev.1 “LOM IECEx certification procedure for CoPC (Guidance for the applicants)”. This document is available to all employees and clients.

### Certification application, assessment and examination processes

Assessment found LOM has a documented system to address the requirements of ISO/IEC 17024, IECEx CoPC Scheme requirements of IECEx 05 and supporting ODs, namely OD 503, OD 504, OD 506 and OD 508.

They also have facilities to adequately perform both theoretical examinations and practical assessments according to IECEx CoPC requirements, eg OD 503 and OD 504.

LOM have documented procedure PIECEX 02 “LOM requirements in IECEx Certification of Personnel Competence Scheme” which addresses their process for handling applications for IECEx Scheme 05 Certificates. It is supported by appropriate forms. These were reviewed in detail over the course of the assessment period and during that time, a number of changes and additions were made to address issues raised during the assessment. With all issues raised now addressed, the assessment team conclude that LOM have a solid documented system that meets ISO/IEC 17024 and IECEx requirements to operate as an ExCB in the IECEx CoPC Scheme.

Application form RCPIECEx 02.1 is available in the Quality System and will be available on the LOM’s website once accepted by IECEx Managemet Committee as ExCB for Scheme 05.

The assessment included a site assessment visit to LOM facility that serves as the Examination Center for the ExCB operations in the IECEx CoPC Scheme. From the site visit the assessment team concluded appropriate facilities for the conducting of examinations. Photos were taken of these facilities and are included in the site assessment report held by the Secretariat. The assessment team concludes that LOM possess the necessary practical examination facilities to address practical assessments according to IECEx OD 503 and OD 504 for their scope.

LOM have also prepared procedure for assessment of the competence and knowledge of all persons to prepare and conduct assessments according to IECEx requirements with sound knowledge of the relevant standards. A significant amount of time was invested in conducting 1-1 technical interviews with each of the technical staff and examiners identified in the LOM’s Competency Matrix. From this review and technical interviews, the assessment team conclude that LOM have sufficiently qualified and experienced personnel to conduct examinations and assessments that meet IECEx requirements.

### Issuing of IECEx Personnel Competence Assessment Report (PCAR)

Procedure PIECEX 02 “LOM requirements in IECEx Certification of Personnel Competence Scheme” is the internal procedure that is relevant for the process of issuing Personnel Competence Assessment Report (PCAR).

### Decision on Certification

The certification decision process is addressed in Procedure PIECEX 02 “LOM requirements in IECEx Certification of Personnel Competence Scheme”. The process provides the necessary independence between the examination / independent review and the decision to issue or maintain IECEx CoPC certificates.

### Suspension and cancellation of certificates

Suspension and cancellation of certificates is addressed in Procedure PIECEX 02 “LOM requirements in IECEx Certification of Personnel Competence Scheme”. This was found to meet IECEx requirements.

## Statistics

Does not apply at this stage, given that LOM is an applicant ExCB.

## Question bank

Question bank was prepared and reviewed by assessors during this initial assessment of applicant ExCB. Following some corrections and update, questions were found to be sufficient and correct to meet the requirements of IECEx and are passed to IECEx Secretariat.

## National accreditation

LOM does not hold accreditation to ISO/IEC 17024 and hence the assessment conducted a full assessment with all elements now showing compliance.

In the absence of accreditation to ISO/IEC 17024, LOM will be subjected to the surveillance requirements of the IECEx CoPC Scheme.

## Comments (including issues found during assessment)

During the course of the IECEx assessment of LOM, a number of items were raised with these being detailed in the site assessment report, Form F-004. All of these have been rectified with the assessment team able to close all items. The following is an indication of some of the items raised by the assessment team that has been subsequently closed to the satisfaction of the assessment team.

* Revised procedures to ensure all stages of the IECEx CoPC process were clearly identified
* Revised information to be prepared for publishing on LOM’s website to ensure all relevant and necessary information is available to interested parties
* Clarification of capabilities and roles of key staff involved in the CoPC certification process, who performs contract review, preparation of exams etc
* Revision of certain documents to further strengthen the separation between Training and IECEx CoPC assessments
* Others

#  Annexes

1. Scope for IECEx Certified Equipment Scheme
	1. Current standards

The Application by LOM was limited to the IECEx 05, CoPC Scheme, hence this section is outside the scope of this assessment.

* 1. Superseded standards

N/A

1. Overall Organisation Chart



1. Organisation Chart of ExCB



The Certification Committee is formed by:

* Natalia Vázquez Viñuela
* Javier García Torrent
1. Accreditation Certificate for ISO/IEC 17024

At the time of the Assessment, LOM does not hold national accreditation to ISO/IEC 17024. Therefore, as part of this assessment the IECEx Assessment Team conducted a complete and thorough assessment to the requirements of ISO/IEC 17024 using the IECEx OD 507 “ISO/IEC 17024 Checklist”.

The completed OD 507 Checklist resides within the IECEx Secretariat, showing compliance with all requirements. LOM implemented all requirements of ISO/IEC 17024 standard, IECEx CoPC Scheme requirements and supporting ODs, namely OD 503, OD 504, OD 506 and OD 508 in quality system.