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

**TITLE: Reassessment and scope extension report for the Slovenian Institute of Quality and Metrology, Ljubljana (SIQ Ljubljana), an Accepted Ex Certification Body (ExCB) and an Accepted Ex Testing Laboratory (ExTL) in the Equipment Scheme 02, and an Accepted ExCB in the Service Facilities Scheme, 03, to include IEC 60079-28**

**within their scope.**

**Circulation to: Members of the IECEx Management Committee, ExMC**

**INTRODUCTION**

This document contains the Reassessment and scope extension report for Slovenian Institute of Quality and Metrology, Ljubljana (SIQ Ljubljana), an Accepted Ex Certification Body (ExCB) and an Accepted Ex Testing Laboratory (ExTL) in the Equipment Scheme 02, and an Accepted ExCB in the Service Facilities Scheme, 03, to include the following Standard within their scope.

|  |  |
| --- | --- |
| Number | Title |
| IEC 60079-28  Edition 2 | Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation |

The report is hereby submitted for voting by the ExMC.

***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 2023 01 25***

***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 assessment report for

Slovenian Institute of Quality and Metrology, Ljubljana (SIQ Ljubljana)

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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# Assessment information

## Type of body covered by this assessment:

|  |  |
| --- | --- |
| 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 |  |

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 |  |
| Surveillance |  |
| Re-assessment |  |
| Scope extension |  |

## Details of body

### Country

Slovenia

### Name of body

SIQ Ljubljana - Slovenian Institute of Quality and Metrology, Ljubljana

### Name and title of nominated principal contact

|  |  |  |
| --- | --- | --- |
| Name | Title | E-mail address |
| Matej Debenc | Technical leader  Ex-department | matej.debenc@siq.si |

## Assessment information

### Members of the assessment team

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

### Place(s) of assessment

|  |  |
| --- | --- |
| Trzaska cesta 2 SI-1000 Ljubljana SLOVENIA | Ex ‘d’/’i' test facility:  Podvine 36  SI-1410 Zagorje ob Savi  SLOVENIA |
| Masera - Spasiceva ulica 10 SI-1000 Ljubljana SLOVENIA |  |

### Assessment date(s)

03 - 07 October 2022 (5 man-days). This assessment was conducted on-site given the lifting of travel restrictions in the area.

## Application information and background information on the assessment

This is a re-assessment, including a scope extension to include IEC 60079-28:2015.

## Scopes

### ExCB scope for equipment certification scheme

The scope for the ExCB is shown in Annex A.

### ExTL scope

The ExTL scope is the same as for the ExCB.

### ATF Scope

N/A

### ExCB scope for Service Facilities Scheme

Equipment repair, including equipment repair standard and associated protection techniques.

|  |  |  |  |
| --- | --- | --- | --- |
| IEC 60079-19  Edition 4.0 | Explosive atmospheres – Part 19: Equipment repair, overhaul and reclamation | Comments |  |
| **With the following types of protection** | **ID** |  |  |
| Flameproof Enclosure "d" | yes | Included in scope |  |
| Increased Safety "e" | yes | Included in scope |  |
| Type of Protection "n" | yes | Included in scope |  |
| Intrinsic Safety "i" | yes | Included in scope |  |
| Oil Filled "o" | yes | Included in scope |  |
| Pressurisation "p" | yes | Included in scope |  |
| Dusts to IEC 60079-31 "t" | yes | Included in scope |  |
| Dusts to IEC 61241-1 "tD" | yes | Included in scope |  |
| Dusts to IEC 61241-1-1 "DIP" | yes | Included in scope |  |
| Other (e.g. non-electrical) | yes, non-electrical | Included in scope |  |

Other service facility standards: N/A

## ExCB scope for Conformity Mark Licensing Scheme

N/A

## ExCB scope for IECEx Personnel Competence Scheme

N/A

# Common information

## Legal entity of body

SIQ Ljubljana was founded at the end of 1992, as the successor of the Institute of Quality and Metrology (IKM) by the Contract on foundation. SIQ Ljubljana is a public, non-profit-distributing institution founded according to the law on institutions (OG 12/92-1).

The document was checked during the assessment and found to meet the requirements of the IECEx.

## Financial support

As a professional, independent and impartial institution, SIQ Ljubljana is a self-funding organization relying on the income from its testing, calibration and certification of electrical products, assessment of management systems as well as relevant training to fund its operating and investment costs. There is no financial support from government and/or other social organizations.

## History

SIQ Ljubljana was founded in 1992 to succeed the Institute of Quality and Metrology (IKM) with the transfer of all goods, including staff, values, rights and obligations agreed between SIQ Ljubljana and IKM (ratified by IKM Council on 1993-01-18). SIQ Ljubljana has a total of over 50 years of involvement in testing and certification of electrical products, and metrology at the same premises in Ljubljana. Ex testing was commenced in the mid-1990s. Since 2002, SIQ has been becoming as an ExCB and ExTL of IECEx certified equipment scheme.

## Documentation

### Quality manual

Quality Manual with identification number SR001, addresses all the major quality requirements with cross reference tables for all the relevant international or regional standards. The manual is issued in Slovene and English. This latest version has the number SR001E-30. The Manual is available in an electronic version on the SIQ Ljubljana intranet and is regarded as the valid version for use.

The Quality Manual as well related documents from different levels were reviewed during the assessment and found to meet the requirements of the IECEx.

### Procedures

There are a significant number of detailed procedures dealing with the operation at SIQ Ljubljana. All these procedures are referenced and electronically linked in the above Quality Manual at the end of each chapter and also within the document. Again, these documents are available on the intranet. Certification within the IECEx Scheme, CD306E, Issue 14, issued 2022-09, is the main procedure used for IECEx. EU type examination and unit certification procedure, CNEx07, Issue 13, dated 2021-12, which includes states that all use ODs and ExTAG decision sheets.

Procedures most relevant for the operation under IECEx were reviewed during the assessment and found to meet the requirements of the IECEx.

### Work instructions

In addition there are many work instructions available and a range of other documentation such as guides, including work instruction TNEx77 covering type tests as required in IEC 60079-28 (optical power and irradiance test) supporting their extension of scope. All those documents are accessible via a comprehensive menu system on the intranet.

Documents were reviewed during the assessment and found to meet the requirements of applicable Ex standards and the IECEx.

### Records (including test records where relevant)

SIQ Ljubljana establishes suitable procedures dealing with quality records. All critical records are in hard copy, especially in the Explosion Protection Department, although increasingly SIQ Ljubljana is receiving documentation in electronic form. All records are retained for a minimum of 10 years at SIQ Ljubljana according to the relevant procedure. Clause 5., Control of records, of the document SD003- Control of documents and records states 6 years unless otherwise required by certification scheme. Editing project files (including calibration certificates for equipment, ExTRs, CoCs), TNEx20, Issue 19, dated 2018-12 indicates that they are kept indefinitely.

Example of the project archive was reviewed, and found that the records are detailed, and information is sufficient to the satisfaction of the assessment team and meets the requirements of the IECEx. Ex server on K drive for SIQ.

The system meets the process requirements of OD 207. The overall system meets the requirements of IECEx system.

### Document change control

Documents are all subject to a change control procedure, SD003-21/ 2022-09-05. The detail is specified in Clause 4.6 of SD003-21 Review and approval, which includes regular checks of those being used. Those documents older than five years are verified. Only documents published on the intranet are regarded as controlled for the purpose of staff use. Two hard copies of each document are signed and retained. When a document is revised an indication, such as a marginal bar or yellow highlighting, is included in the document to show where changes have occurred.

The use of the correct standard is controlled through having forms that are released according to the appropriate edition of the standard to be used. In the case of the IECEx Scheme these forms will be used in conjunction with the ExTRs. SIQ Ljubljana is involved with committee work for the IEC standards and so is aware when IEC standards are being changed.

## Confidentiality

There is a statement in Clause 4.7 of the Quality Manual that stipulates all personnel including the internal staff, members of Steering Committee, as well as the outside members of Boards are required to sign an agreement on declaration of confidentiality (GN318, Statutory Statement for internal staff and CN109, Statutory Statement for board members). Personnel are also trained to ensure they follow the confidentiality requirements to protect the integrity and reputation of the business. They are required to sign every two years. Examples of the written agreements from board members and internal staff were reviewed and satisfactory.

The system meets the requirements of ISO/IEC 17065 and IECEx.

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

Communication with public and customers is assured by descriptions of procedures and by forms published on the internet site at [https://www.siq.si](https://www.siq.si/)/. Detailed procedure is described in Clause 13 of Quality Manual.

SIQ maintains and publishes information on:

* auditing processes,
* processes for granting, refusing, maintaining, extending, suspending, renewing, or withdrawing certification or extending or reducing the scope of certification,
* types of management systems and certification programs in which it operates,
* use of the name of the certification body and the certification mark or logo,
* processes for processing requests for information, complaints and appeals,
* general service request web form applicable for product and persons certification as well,
* impartiality policy.

Other information is available on request.

## Recognitions and agreements

SIQ Ljubljana has a wide range of recognitions and agreements, mainly including:

• Notified Body under ATEX Directive and other 8 Directives and 2 regulations.

• IECEE CB Scheme as an NCB and CBTL;

• European certification scheme (ENEC);

• Member of IQNet for management systems; and

• Member of the European CENELEC Certification Agreement

## Internal audit

The requirements for internal audit are specified in general procedure SN012 Internal Audits. Auditing is done at least once a year. The plan of internal audit is normally released at the middle of April. The latest audit was conducted on 2022-09-13 and 2022-09-14. It covers two audits, one is so-called vertical audit which is technical and the other is so called horizontal covering general requirements of the relevant standards. There is quite a large number of staff trained and accepted for internal auditing. A comprehensive chart (SN018) shows their qualifications, training and areas that they are considered competent to audit.

Both schemes (02 and 03-5) are included. All audit records are retained.

The system meets the requirements of ISO/IEC 17065 and IECEx.

## Management review

The detailed processes on management review are contained in clause 6.10 of Quality Manual. The management review is specified to be conducted once a year. The latest meeting of management review was held on 2022-04-20. Andrej Lukšič, a representative from the Ex department attended the meeting. The review covered the operation of IECEx Certification Body and of the Testing Laboratory, including internal audits, corrective actions, accreditation audits, customer satisfaction and complaints data (including IECEx). The matters covered by the meeting also addressed the relevant requirements for ISO/IEC 17065, ISO/IEC 17024 and ISO/IEC 17025.

A documented report on management review was viewed and found satisfactory for the IECEx.

## Contracting, subcontracting and witness testing

### Contracting

N/A

### Subcontracting

SIQ Ljubljana has not yet had the need to subcontract for Ex but does use subcontractors for other fields. Procedures for sub-contracting are included in the Product Certification procedure CN218E, Clause 2.7. SIQ assumes full responsibility for the testing which includes control over the process.

In addition, SIQ doesn’t have the necessary test facilities for the below tests, although they have enough personnel competence. They have a list of subcontractors which are all facilities of accepted ExTLs within IECEx system. There are no signed agreements for subcontracting related to IECEx but would be signed once a project is open involving these tests.

The following tests are, or may be, subcontracted by the body:

| Standard | Clause | Test |
| --- | --- | --- |
| IEC 60079-0 | 26.10 | Resistance to light |
| IEC 60079-1 | 15.4.3 | Thermal tests (breathing and draining devices) |
| IEC 60079-1 | 15.4.4 | Test for non-transmission of an internal ignition (breathing and draining devices) |
| IEC 60079-7 | 6.2.1 | Determination of starting current ratio IA/ IN and the time tE (rotating electrical machines) |
| IEC 60079-7 | 6.2.3.1 | Stator winding insulation system (rotating electrical machines) |
| IEC 60079-7 | 6.2.3.2 | Cage rotor (rotating electrical machines) |
| IEC 60079-7 | 6.2.4 | Overspeed test of cemented magnets (rotating electrical machines) |
| IEC 60079-7 | 6.3.4 | Abnormal operation of luminaires |
| IEC 60079-7 | 6.3.5 | Sulphur dioxide test for Level of Protection “eb” for the connection of bi-pin lamp caps to lampholders |
| IEC 60079-7 | 6.3.6 | Vibration test for Level of Protection “eb” for luminaires with bi-pin lamps |
| IEC 60079-7 | 6.3.7 | Test for wiring of luminaires subject to high-voltage impulses from ignitors |
| IEC 60079-7 | 6.3.8 | Tests for electronic starters for tubular fluorescent lamps and for ignitors in  Level of Protection “ec” for discharge lamps |
| IEC 60079-7 | 6.3.9 | Test for starter holders for luminaires in Level of Protection “ec” |
| IEC 60079-7 | 6.6.3 | Mechanical shock test |
| IEC 60079-7 | 6.6.4 | Test for ventilation of Level of Protection “eb” battery container |
| IEC 60079-7 | 6.7 | Verification and tests for cells and batteries of Level of Protection “ec” |
| IEC 60079-7 | Annex A | Temperature determination of electrical machines |
| IEC 60079-7 | Annex G | Test procedure for T5 (only 8 W),T8, T10 and T12 lamps |
| IEC 60079-11 | 10.1.3.2 | Spark ignition test with O2 enrichment |
| IEC 60079-28 | 5.2.4 and 6 | Ignition tests |

More details, including bodies to whom tests will be subcontracted, details of accreditation of those bodies and details of how the subcontracted bodies are checked, are included in the site assessment report.

### Off-site and Witness testing

Procedures for off-site and witness testing are covered in 5.1.3.4 CD306E, which includes reference to IECEx OD-024 and states that all certifications use ODs and ExTAG decision sheets. It includes information for the updating of the current information in the IECEx OD 024 Testing Register – Offsite and Witness Testing Agreements.

## Training and competence

Clause 5 of TDEx02, Issue 35, dated 2022-09, Personnel of Ex Department, covers training and requires an annual plan. There is a document for the annual plan on training, TNEx 24. Annual plan of education for Ex team colleagues, and the detailed requirements can be found in Clause 7.5 of quality manual. Training plans are made annually, supplemented on demand and checked by management review. Records are kept of the trainings carried out. This details the staff and the training that they have undertaken, and particularly noted that training was arranged for a new staff, and qualification document was sighted and satisfactory.

There was a meeting with the output of the IECEx Annual Meeting (Remotely), 06 – 09 September, 2022 (GN321).

Competence of staff is documented in TDEx 02-35/09-2022.

This was found to be satisfactory, meeting the requirements of the IECEx.

## Complaints and appeals (including appeals to IECEx)

Complaints are collected in each department and dealt with in accordance with procedure Control of non-conforming work and preventive acting, Clause 6.2 in SN029 which also covers appeals. In addition there is a procedure Appeals against the Decisions taken by the Certification Commission, Notified Body and Inspection body, CR105E that covers appeals against the decisions taken by the Certification Commission. SIQ has a Board of Appeals to which all appeals go. TPEx07 contains information for customers/applicants that includes the latest appeals process to IEC via IECEx in accordance with CA 01 and IECEx 01-S.

There were no complaints and appeals since last Re-assessment.

## Impartiality

SIQ is an independent body with no activities or interests in the products that are tested, inspected or certified. SIQ has a public statement on its website to confirm its independence and impartiality.

Based on the document SN047-04/ 2022-01-07 different measures were discussed to safeguard impartiality. The risk analysis (SN050-04) shows different threats that were identified. Self-interest, familiarity, external pressure are among the identified threats and measures have been implemented to mitigate the risks. SN050 also specifies the persons responsible for the specific risk and the measures.

The code of ethics SR009E- 10 / 2020-01-22 was verified. All personnel have to sign statement GN318- 10 / 2020-12-14 on impartiality. Based on this it may be assumed that all personnel is aware of the risks and their responsibility to safeguard the impartiality.

The mechanism for involvement if the interested parties is the Board of certification body; rules are contained in CR101. It was explained that the board has representatives from producers, standardization body, consumers, quality management experts, regulators and chamber of commerce.

All staff, Board Members and the Steering Committee have signed regarding impartiality, honesty and confidentiality of their work. During the assessment, the list and several signed documents were checked.

The process meets the requirements for ISO/IEC 17065, ISO/IEC 17025 and IECEx.

## Active involvement in development of Decision Sheets

Matej Debenc regularly receive all proposed and issued Decision Sheets. He always informs co-workers and after internal discussion they provide their comments to the IECEx secretariat.

## Special facts to be noted

None, other than those mentioned throughout this report.

## 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
* Checklist for ISO/IEC 17065
* Checklist for ISO/IEC 17025
* Completed Technical Capability Document (TCD)
* Photos of the facilities/tests witnessed are included in the above TCD
* Information on competencies
* Information on contracting/subcontracting
* Assessors’ notes
* Other

## Recommendations

Based on the assessment performed on 03 – 07 October 2022, SIQ Ljubljana is recommended for continued acceptance in the IECEx scheme as:

* An ExCB in the IECEx Certified Equipment Scheme
* An ExTL in the IECEx Certified Equipment Scheme
* An ExCB in the IECEx Certified Service Facilities Scheme

This is according to the scope of the standards listed in this document (including the extension of scope to include IEC 60079-28),

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

Date: December 2022

# ExCB for IECEx Certified Equipment Scheme

## Assessment references

### General references

1. IECEx 02 IECEx Certified Equipment Scheme covering equipment for use in explosive atmospheres – Rules of Procedure
2. IECEx OD003-2 Assessment, surveillance assessment and re-assessment of ExCBs and ExTLs operating in the IECEx 02, IECEx Certified Equipment Scheme
3. ISO/IEC 80079-34 Explosive atmospheres – Part 34: Application of quality systems for equipment manufacture
4. IECEx OD 009 Issuing of CoCs, ExTRs and QARs
5. IECEx 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
6. IECEx OD 026 IECEx Certified Equipment Scheme – Guidelines for the qualification of Lead Auditor and Auditors, in accordance with the IECEx System
7. ISO/IEC 17065 General requirements for bodies operating product certification systems Conformity assessment — Requirements for bodies certifying products, processes and services
8. IECEx OD 107 Harmonised check list for certification bodies ISO/IEC 17065
9. IECEx OD 280 IECEx Certified Equipment Scheme – Guide to Certification of Non-electrical Equipment and Protective Systems
10. IECEx OD 060 IECEx Guide for Business Continuity – Management of Extraordinary Circumstances or Events Affecting IECEx Certification Schemes and Activities
11. IECEx Technical Capability Document (TCD)
12. ExTAG decision sheets (DSs)

NOTE The latest editions of the above documents were applied, unless otherwise specified

### Additional references applied for this assessment

## ExCB persons interviewed

|  |  |
| --- | --- |
| Name | Position |
| Bojan Pečavar | Certification Director |
| Gregor Schoss | Managing Director / Deputy Certification Director |
| Hana Furlan | Quality Manager |
| Matej Debenc | Technical Leader, Ex Department |
| Andrej Lukšič | Deputy Technical Leader, Ex Department Testing Engineer |
| Štefan Krek | Testing Engineer |

## Associated ExTL(s)

SIQ Ljubljana - Slovenian Institute of Quality and Metrology, Ljubljana

The ExTL is integral with the ExCB.

## Associated certification functions

SIQ Ljubljana - Slovenian Institute of Quality and Metrology, Ljubljana is European Notified Body No. 1304 for the ATEX Directive 2014/34/EU. Furthermore, the Notified Body is active as a national surveillance/inspection body according to directive 1999/92/EC (Ex installation requirements).

## National marks and certificates

SIQ is a notified body under ATEX, 8 other European directives, and 2 Regulations. There is also an SIQ voluntary certification mark:

Logo

Description automatically generated

## Standards accepted

The scope for the ExCB for IECEx Certified Equipment Scheme is shown in Annex A.

## National differences to IEC standards

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

## Organisation

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

|  |  |  |
| --- | --- | --- |
| Name | Title | Experience (years) |
| Gregor Schoss | Managing Director | 25 |
| Bojan Pečavar | Deputy Managing Director, Certification Director | 39 |

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

|  |  |  |
| --- | --- | --- |
| Name | Title | Experience (years) |
| Hana Furlan | Quality Manager | 14 |

### Name and title of signatories for certification

|  |  |  |
| --- | --- | --- |
| Name | Title | Comments |
| Gregor Schoss | Managing Director | 25 |
| Bojan Pečavar | Deputy Managing Director, Certification Director | 39 |

### Other employees in ExCB activity

|  |  |  |
| --- | --- | --- |
| Name | Title | Experience in Ex (years) |
| Zdravko Kramar | Business Leader, Ex Department | 30 years |
| Matej Debenc | Technical Leader, Ex Department | 15 years |
| Andrej Lukšič | Deputy Technical Leader, Ex Department | 20 years |
| Štefan Krek | Certifier | 12 years |

## Organizational structure

See Annex B and Annex C to this report.

## Indemnity insurance

SIQ Ljubljana has an insurance policy from Triglav insurance company. A copy of the insurance certificate (no OD40103081210) was sighted and valid to 9 March 2023. The policy is worldwide with appropriate insured amount.

## Resources

SIQ Ljubljana is equipped with all the necessary resources for IECEx certification. There is an extensive range of procedures for support of the operation at SIQ. The total size of SIQ Ljubljana is over 160 people. Seven of these have some involvement with the Ex certification and testing, in which three staff are qualified as ExTR approver, three staff are qualified as QAR reviewer/approver, two staff are qualified as manufacturer auditors and three staff are qualified as signatory of CoC. Some of the staff working in ExCB also works in ExTL as Ex test engineers and ExTR reviewers.

The organization of work in ExCB was found meeting the requirements of ISO/IEC 17065 and IECEx.

## Committees (such as governing or advisory boards)

SIQ Ljubljana has a number of key bodies associated with its operations. These include:

• SIQ Council – as the governing board of SIQ Ljubljana, it consists of the representatives of the founders, the representatives of SIQ Ljubljana employees as well as the representatives of the public/economic/industrial associations and institutions representing the customers of SIQ's services. Its function covers approval of business plans, acceptance of annual reports, and definition of policy for fees and charges for services.

• Board of Certification Body (Steering Committee) – this consists of representative of all interested parties.

This meets at least once a year usually after the management review, last meeting was 2022-05-25. The minutes were viewed, and the topics covered found to meet the requirements of ISO/IEC 17065.

• Board of Appeal – this comprises 3 members, including the representatives from the consumers association of Slovenia, the University and the Director of SEM Department.

• Certification Commissions – for these the Quality Manual states ‘The members of certification commissions can be elected exclusively from the SIQ Ljubljana staff. They shall be qualified for their functions and shall in no way be connected with products, services, and interests of the suppliers involved in the certification (CD306).

The system was found meeting the requirements of ISO/IEC 17065 and the IECEx requirements.

## Certification operations

### National approval/certification methods

Slovenia is a member of the European Union and the ATEX certification system has been adopted as national certification methods for Ex products. As a notified body with registration number 1304 under ATEX directive, SIQ Ljubljana issue type examination certificates and QANs for ATEX products.

In addition, in the Ex field the main activity carried out by SIQ Ljubljana is site inspection of Ex products which covers Ex installations, maintenance, repair and overhaul.

### Certification policy

SIQ Ljubljana has a specific certification policy, CR107, Issue 02, 2022-05-25, that states they are open to everyone who wishes to use their services, they will treat everyone equally, they will try to establish themselves internationally, they will ensure a staff situation with no conflict of interest, they will follow requirements of standards and internal procedures, and they will use income to improve the operation continuously.

The system was found meeting the requirements of ISO/IEC 17065 and the IECEx requirements.

### Application for certification

SIQ Ljubljana has an application form specific to Ex certification (TOEx02), and it is written in English and Slovene. All the application forms are published on SIQ’s website.

They also have an open document at SIQ Ljubljana website to provide a Guide how to apply for IECEx certification, TPEx07.

### Certification decision

Certification Decision is always made by the Certification Commission, based on evaluation of the results performed by the certification personnel nominated in CN219 and TDEx 02.

The detailed procedure for certification decision is addressed in CD306E Certification within IECEx scheme. The procedure as well as examples of records of certification decision were reviewed and found to meet the requirements of ISO/IEC 17065 and IECEx Certified Equipment Scheme.

### Suspension and cancellation of certificates

For the IECEx suspension and withdrawal of certificates is covered in CD306E Certification within the IECEx scheme. More detail is contained in Rules on Product Certification, CR201. The process is managed through the Certification Commission. There are 9 certificates that have been cancelled due to stopping of production (8 more at previous assessment). There are no suspended certificates.

## Certificates issued

Number of certificates issued under for the preceding two years for each type of protection:

| Standard numbers | Type of protection or other identifying information | Number of issued certificates (for last 2 years) | | Total |
| --- | --- | --- | --- | --- |
| 2020 | 2021 |
| IEC 60079-1 | Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures “d” | 3 IECEx  5 ATEX | 1 IECEx  3 ATEX | 12 |
| IEC 60079-7 | Explosive atmospheres – Part 7: Equipment protection by increased safety ““e”” | 8 IECEx  6 ATEX | 7 IECEx  10 ATEX | 31 |
| IEC 60079-11 | Explosive atmospheres – Part 11: Equipment protection by intrinsic safety “i” | 4  9 | 4  11 | 28 |
| IEC 60079-15 | Explosive atmospheres – Part 15: Equipment protection by type of protection ““n”” | 5  2 | 3  9 | 19 |
| IEC 60079-18 | Explosive atmospheres – Part 18: Equipment protection by encapsulation “m” | 3  3 | 3  0 | 9 |
| IEC 60079-31 | Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure ““t”” | 0  6 | 0  0 | 6 |
| IEC 60079-35-1 | Explosive atmospheres – Part 35-1: Caplights for use in mines susceptible to firedamp – General requirements – Construction and testing in relation to the risk of explosion | 0 | 0 | 0 |
| ISO 80079-36 | Explosive atmospheres – Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirements | 0  6 | 0  1 | 7 |
| ISO 80079-37 | Explosive atmospheres – Part 37: Non-electrical equipment for explosive atmospheres – type of protection “c”, “b” and “k” | 0  6 | 0  1 | 7 |
| IEC TS 60079-46 | Explosive atmospheres – Part 46 - Equipment assemblies | 1  4 | 0  0 | 5 |

NOTE Above include certificates to IEC 60079-0 unless otherwise shown

## National accreditation

SIQ Ljubljana holds a national accreditation for product certification body (CP-001) according to SIST EN ISO/IEC 17065 from Slovenian Accreditation (SA), a member of International Accreditation Forum (IAF) and a signatory of Multilateral Agreements of the European Co-operations of Accreditation (EA).

The current SA accreditation certificate for the product certification body of SIQ Ljubljana is attached in Annex D of this report. It is noted that the accreditation scope covers all the standards listed in Annex A of this report. The accreditation audit was done on 3rd to 5th October 2022. New certificate is currently under preparation. Records were check and no issues that would jeopardize SIQ accreditation were identified.

The results of the last ISO/IEC 17065 audit were reviewed and it was verified that all nonconformities relevant to the Ex department were resolved to the satisfaction of SA.

Assessment of ExCB capability to operate in accordance with IEC standards for the applied scope of IECEx related Ex equipment certification requested was part of this Assessment.

## Assessment of manufacturers and issue of QARs

There is a documented procedure for assessment of manufacturers and issue of QARs according to IECEx operational documents. Assessment of Quality System in Production, CNEx09, and Guide on Personnel Competence Management TDEx02 addresses the approaches used for selecting auditors and experts. Currently SIQ Ljubljana has two qualified auditors for IECEx.

The list of out-of-date QARs was reviewed and found to be satisfactory.

The above procedure addresses the initial issue of QARs or the review of other ExCB QARs for the purpose of issuing certificates, as well as the maintenance process in accordance with OD 025 and the need to ensure that all certificates on the website are linked to current QARs.

ExCB applied the provisions of OD-060 into their QMS, to deal with specific situations.

The system complies with IECEx requirements.

## Comments (including issues found during assessment)

SIQ has the necessary staff and quality system in place for their scope as an ExCB. There were some issues related to the QMS and implementation of recent updates and new IECEx OD’s. All issues were revised to the satisfaction of the assessment team and now meet the requirements of the IECEx.

# ExTL for IECEx Certified Equipment Scheme

## Assessment references

### General references

1. IECEx02 IECEx Certified Equipment Scheme covering equipment for use in explosive atmospheres – Rules of Procedure
2. IECEx OD003-2 Assessment, surveillance assessment and re-assessment of ExCBs and ExTLs operating in the IECEx 02, IECEx Certified Equipment Scheme
3. IECEx OD009 Issuing of CoCs, ExTRs and QARs
4. ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories
5. IECEx OD 018 Harmonised check list for testing and calibration laboratories ISO/IEC 17025
6. IECEx TCD 60079, ISO 80079 Series and ISO 16852 Technical Capability Document
7. ExTAG decision sheets (DSs)
8. IECEx OD 202 IECEx Certified Equipment Scheme – IECEx Proficiency Testing Program

NOTE The latest editions of the above documents were applied, unless otherwise specified.

### Additional references applied for this assessment

1. IECEx OD 280 - Guide to Certification of Non-electrical Equipment and Protective Systems
2. IECEx OD 060 IECEx Guide for Business Continuity – Management of Extraordinary Circumstances or Events Affecting IECEx Certification Schemes and Activities

## ExTL persons interviewed

|  |  |
| --- | --- |
| Name | Position |
| Štefan Krek | Testing Engineer |
| Igor Smrke | Testing Engineer |
| Andrej Lukšič | Testing Engineer |
| Igor Čoko | Testing Engineer |
| Matej Debenc | Technical Leader – Ex Department |

## Associated ExCB(s)

SIQ Ljubljana – Slovenian Institute of Quality and Metrology, Ljubljana. The ExCB is integral with the ExTL.

## Organisation

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

|  |  |  |
| --- | --- | --- |
| Name | Title | Experience (years) |
| Gregor Schoss | Managing Director | 25 |
| Bojan Pečavar | Deputy Managing Director, Certification Director | 39 |

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

|  |  |  |
| --- | --- | --- |
| Name | Title | Experience (years) |
| Hana Furlan | Quality Manager | 14 |

### Other employees in ExTL activity

|  |  |  |
| --- | --- | --- |
| Name | Title/responsibility | Experience in Ex (years) |
| Štefan Krek | Testing engineer | 12 |
| Matej Debenc | Technical leader, Ex-department | 15 |
| Andrej Lukšič | Testing engineer | 20 |
| Mirko Čoko | Testing engineer | 19 |
| Igor Smrke | Testing engineer | 0 in Ex, 10 in safety  (only performing optical power and irradiance test together with Štefan Krek) |
| Boštijan Glavič | Testing engineer | 15 |

## Organizational structure

See Annex B and Annex C.

## Resources

With exception of the subcontracted test items, SIQ Ljubljana is well equipped with necessary testing facilities. The Ex d/Ex i testing facility is located in Podvine 36, SI-1410 Zagorje ob Savi, a part of premises of Slovenian Institute of Quality and Metrology, Ljubljana (SIQ Ljubljana). It is about 60 km away from the SIQ Ljubljana.

There is an extensive range of procedures for support of the operation at SIQ Ljubljana. The total size of SIQ Ljubljana is over 160 people. Seven of these have some involvement with the Ex certification and testing, in which three staff are qualified as Ex test engineers and two are ExTR reviewers. The staff working in ExTL also work in ExCB as ExTR approvers, manufacturer auditors, reviewers/approvers of QARs.

All testing equipment, where range significantly affects accuracy and the reliability of the test, is calibrated. The equipment is subject to ongoing monitoring for due calibration and control before each use. Standards and reference materials are subject to ongoing checking in accordance with established procedures. Laboratory maintains lists of equipment, which include, among others: name and type of device, identification number, place of use. In addition, each measuring and testing device has a sticker with information about the status of calibration.

While some ExCB staff may also be involved in Ex testing, during the assessment a detailed review of the process to deal with independence and separation between testing and certification decisions was undertaken noting that Staff involved in testing of a project cannot be involved in the certification decision.

## Test reports issued

See 3.14 Certificates for the approximate number of ExTRs issued.

This is Re-assessment of accepted ExTL integral with the accepted ExCB.

## National accreditation

SIQ Ljubljana holds a national accreditation for testing laboratory (LP-009) according to SIST EN ISO/IEC 17025:2017 from Slovenian Accreditation (SA), a member of ILAC for calibration and testing and a signatory of Multilateral Agreements of the European Co-operations of Accreditation (EA).

The current SA accreditation certificate for testing laboratory of SIQ Ljubljana is attached in Annex E of this report.

It is noted that the accreditation scope covers all the standards listed in Annex A of this report. The accreditation audit was done on 3rd to 5th October 2022. New certificate is currently under preparation. Records were check and no issues that would jeopardize SIQ accreditation were identified.

The results of the last ISO/IEC 17025 audit were reviewed and it was verified that all nonconformities relevant to the Ex department were resolved to the satisfaction of SA.

Assessment of ExTL capability to operate in accordance with IEC standards for the applied scope of IECEx related Ex equipment certification requested was part of this Assessment.

## Calibration

There is a general policy on calibration specified in clause 9.7 of quality manual, and the detailed process is described in MD002E Calibration and test equipment. SIQ Ljubljana also operates as a calibration laboratory. Majority of measuring equipment is calibrated in their accredited laboratories. Each piece of measuring equipment has valid calibration status. In some cases, prior to use equipment is compared to calibrated equipment to check if readings are in prescribed range. The details regarding calibration of equipment are stated in internal document TNEx12, where type and period of calibration is stated for each piece of equipment in use. TNEx 13, Use of test and measuring equipment for Ex department refers to TNEx12. TNEx63, Validation of Ex d equipment in Zagorju ob Savi.

The system for calibration of test equipment is found to comply with ISO/IEC 17025 and IECEx requirements.

All equipment used for witnessed testing was found to be in calibration.

## Tests witnessed during the assessment visit

Following tests were witnessed during the assessment visit:

|  |  |  |  |
| --- | --- | --- | --- |
| Standard and edition | Clause number | Test | Comments |
| IEC 60079-0 Ed.7 | cl. 26.4.2 | Resistance to impact | Testing performed competently. |
| IEC 60079-0 Ed.7 | cl. 26.4.5 | IP66 test to IEC 60529 | Testing performed competently. |
| IEC 60079-0 | cl. 26.12 | Earth continuity test | Testing performed competently. |
| IEC 60079-0 Ed.7 | cl. 26.13 | Surface resistance test of parts of enclosures of non-metallic materials | Testing performed competently. |
| IEC 60079-1 Ed.7 | cl. 15.2.2 | Determination of explosion pressure (reference pressure) | Testing performed competently. |
| IEC 60079-1 Ed.7 | cl. 15.2.3.2 | Overpressure test (static) | Testing performed competently. |
| IEC 60079-11 Ed.6 | cl. 10.1 | Spark ignition test | Testing performed competently. |
| IEC 60079-15 Ed.5 | cl. 11.3 | Restricted-breathing testing | Testing performed competently. |
| IEC 60079-18 Ed.4.1 | cl. 8.1.1 | Water absorption test | Testing performed competently. |
| IEC 60079-28 Ed.2 | cl.5.2.2.2 | Measurement of optical power | Testing performed competently. |
| IEC 60079-28 Ed.2 | cl.5.2.2.3 | Measurement of optical irradiance | Testing performed competently. |

All results provided evidence of staff competence in performing above testing.

## Participation in IECEx Proficiency Testing Programs

Program: PTB Ex PT Scheme

|  |  |  |
| --- | --- | --- |
| Year(s) of participation | IECEx Proficiency Testing program | General information about results |
| 2021 | [Program "Flameproof Joints" (Test Round 2021)](https://www.ex-proficiency-testing.ptb.de/de/programs/fj2021/) | Satisfactory (exact information contained in the report) |
| 2021 | [Program "Small Component Temperature" (Test Round 2021)](https://www.ex-proficiency-testing.ptb.de/de/programs/sct2021/) | Satisfactory (exact information contained in the report) |
| 2019 | [Program "Tests of Enclosures" (Test Round 2019)](https://www.ex-proficiency-testing.ptb.de/de/programs/program-tests-of-enclosures-2019/) | Satisfactory (exact information contained in the report) |
| 2019 | [Program "Battery Testing" (Test Round 2019)](https://www.ex-proficiency-testing.ptb.de/de/programs/program-battery-testing-2019/) | Satisfactory (exact information contained in the report) |
| 2017 | [Program "Explosion Pressure" (Test Round 2017)](https://www.ex-proficiency-testing.ptb.de/de/programs/ep2017/) | Satisfactory (exact information contained in the report) |

SIQ also successfully participated in earlier PTB PTP (before 2017), results have been checked and reported in previous Assessment Report.

## Comments (including issues found during assessment)

SIQ Ex Testing Laboratory has the necessary staff and quality system in place for their scope as an ExTL. Few issues were identified during the assessment which were noted as potentially influential to the performance of testing and assessment. All issues were resolved to the satisfaction of the assessment team and now meet the requirements of the IECEx. Details are contained in Site Assessment Report.

# ATF for IECEx Certified Equipment Scheme

Not relevant for this assessment.

# ExCB for Certified Service Facilities Scheme

## Assessment references

### General references

1. IECEx 03-\* IECEx Certified Service Facilities Scheme covering repair and overhaul of Ex equipment – Rules of Procedure for the Scheme (IECEx 03-0) and for “sub-Schemes” on particular service activities (IECEx 03-2, 03-3, 03-4 and 03-5)
2. IECEx OD 316-2 IECEx Certified Service Facilities Scheme – Part 2: Selection of Ex equipment and design of Ex installations Assessment procedures for IECEx acceptance of Candidate Certification Bodies (ExCBs) for the purpose of issuing IECEx Certificates to Ex Service Facilities providing selection of Ex equipment and design of Ex installations related services
3. IECEx OD 316-3 IECEx Certified Service Facilities Scheme – Part 3: Ex installation and initial inspection Assessment procedures for IECEx acceptance of Candidate Certification Bodies (ExCBs) for the purpose of issuing IECEx Certificates to Ex Service Facilities providing Ex installation and initial inspection service IECEx
4. IECEx OD 316-4 IECEx Certified Service Facilities Scheme – Part 4: Ex inspection and maintenance Assessment procedures for IECEx acceptance of Candidate Certification Bodies (ExCBs) for the purpose of issuing IECEx Certificates to Ex Service Facilities providing Ex installations related services
5. IECEx OD 316-5 IECEx Certified Service Facilities Scheme – Part 5: Repair, overhaul and reclamation of Ex equipment. Assessment procedures for IECEx acceptance of Candidate Certification Bodies (ExCBs) for the purpose of issuing IECEx Certificates to Ex Service Facilities involved in the repair, overhaul and reclamation of Ex equipment
6. ISO/IEC 17065 General requirements for bodies operating product certification systems Conformity assessment — Requirements for bodies certifying products, processes and services
7. IECEx TCD 60079-19, Technical Capability Document IEC 60079 -19: 2010, Explosive atmospheres - Parts 19: Equipment repair, overhaul and reclamation
8. IECEx OD 060 IECEx Guide for Business Continuity – Management of Extraordinary Circumstances or Events Affecting IECEx Certification Schemes and Activities
9. IEC 60079-17 Explosive atmospheres - Part 17: Electrical installations inspection and maintenance
10. IEC 60079-19 Explosive atmospheres – Part 19: Equipment repair, overhaul and reclamation
11. ExSFC Decision Sheets

NOTE The latest editions of the above documents were applied

### Additional references applied for this assessment

None.

## Candidate ExCB persons interviewed

|  |  |
| --- | --- |
| Name | Position |
| Matej Debenc | Technical leader, Ex-department |
| Andrej Lukšič | Deputy Technical leader, Ex-department |

## National marks and certificates

SIQ holds national accreditation for service facilities and is also assessed by the IECEx for this activity. SIQ has a procedure INEx03 as well as the form IOEx31.

The system was checked and found to meeting IECEx requirements.

## Standards accepted

See 1.6.4 of this report.

## National differences to IEC standards

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

## Organisation

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

|  |  |  |
| --- | --- | --- |
| Name | Title | Experience (years) |
| Gregor Schoss | Managing Director | 25 |
| Bojan Pečavar | Deputy Managing Director, Certification Director | 39 |

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

|  |  |  |
| --- | --- | --- |
| Name | Title | Experience (years) |
| Hana Furlan | Quality Manager | 14 |

### Name and title of signatories for certification

|  |  |  |
| --- | --- | --- |
| Name | Title | Comments (years) |
| Gregor Schoss | Managing Director | 25 |
| Bojan Pečavar | Deputy Managing Director, Certification Director | 39 |

### Other employees in ExCB activity

|  |  |  |
| --- | --- | --- |
| Name | Title/responsibility | Experience in Ex (years) |
| Matej Debenc | Tecnical Leader, Ex Department | 15 years |
| Andrej Lukšič | Deputy Tecnical Leader, Ex Department | 20 years |

## Organizational Structure

See Annex B and Annex C to this report.

## Indemnity insurance

SIQ Ljubljana has an insurance policy from Triglav insurance company. A copy of the insurance certificate (no OD40103081210) was sighted and valid to 9 March 2023. The policy is worldwide with appropriate insured amount.

## Resources

SIQ Ljubljana is equipped with all the necessary resources for IECEx certification. There is an extensive range of procedures for support of the operation at SIQ. The total size of SIQ Ljubljana is over 160 people. Seven of these have some involvement with the Ex certification and testing, in which three staff are qualified as ExTR approver, three staff are qualified as QAR reviewer/approver, two staff are qualified as manufacturer auditors and three staff are qualified as signatory of CoC. Some of the staff working in ExCB also works in ExTL as Ex test engineers and ExTR reviewers.

The organization of work in ExCB was found meeting the requirements of ISO/IEC 17065 and IECEx.

SIQ Ljubljana has sufficient resources for the Certified Service Facility Scheme.

## Committees (such as governing or advisory boards)

SIQ Ljubljana has a number of key bodies associated with its operations. These include:

• SIQ Council – as the governing board of SIQ Ljubljana, it consists of the representatives of the founders, the representatives of SIQ Ljubljana employees as well as the representatives of the public/economic/industrial associations and institutions representing the customers of SIQ's services. Its function covers approval of business plans, acceptance of annual reports, and definition of policy for fees and charges for services.

• Board of Certification Body (Steering Committee) – this consists of representative of all interested parties.

This meets at least once a year usually after the management review, last meeting was 2022-05-25. The minutes were viewed, and the topics covered found to meet the requirements of ISO/IEC 17065.

• Board of Appeal – this comprises 3 members, including the representatives from the consumers association of Slovenia, the University and the Director of SEM Department.

• Certification Commissions – for these the Quality Manual states ‘The members of certification commissions can be elected exclusively from the SIQ Ljubljana staff. They shall be qualified for their functions and shall in no way be connected with products, services, and interests of the suppliers involved in the certification (CD306).

The system was found meeting the requirements of ISO/IEC 17065 and the IECEx requirements.

## Certification operations

### National approval/certification Methods

Slovenia is a member of the European Union and the ATEX certification system has been adopted as national certification methods for Ex products. As a notified body with registration number 1304 under ATEX directive, SIQ Ljubljana issue type examination certificates and QANs for ATEX products.

In addition, in the Ex field the main activity carried out by SIQ Ljubljana is site inspection of Ex products which covers Ex installations, maintenance, repair and overhaul.

### Certification policy

SIQ Ljubljana has a specific certification policy, CR107, Issue 02, 2022-05-25, that states they are open to everyone who wishes to use their services, they will treat everyone equally, they will try to establish themselves internationally, they will ensure a staff situation with no conflict of interest, they will follow requirements of standards and internal procedures, and they will use income to improve the operation continuously.

The system was found meeting the requirements of ISO/IEC 17065 and the IECEx requirements.

### Application for certification

SIQ Ljubljana has an application form specific to Ex certification (TOEx02), and it is written in English and Slovene. All the application forms are published on SIQ’s website.

They also have an open document at SIQ Ljubljana website to provide a Guide how to apply for IECEx certification, TPEx07.

### Certification decision

Certification Decision is always made by the Certification Commission, based on evaluation of the results performed by the certification personnel nominated in CN219 and TDEx 02.

The detailed procedure for certification decision is addressed in CD306E Certification within IECEx scheme. The procedure as well as examples of records of certification decision were reviewed and found to meet the requirements of ISO/IEC 17065 and IECEx.

### Suspension and cancellation of certificates

For the IECEx suspension and withdrawal of certificates is covered in CD306E Certification within the IECEx System. More detail is contained in Rules on Product Certification, CR201. The process is managed through the Certification Commission. There are no cancelled or suspended certificates in Scheme 03-5.

## Statistics

Detail experience in assessment and certification of Ex related Service Facilities for the Ex Protection under this application during the past 2 years:

|  |  |  |
| --- | --- | --- |
| Types of protection | ID | Comments |
| Flameproof Enclosure "d" | d | 2 projects under IECEx 03-5 |
| Increased Safety "e" | e | 2 projects under IECEx 03-5 |
| Type of Protection "n" | n | 2 projects under IECEx 03-5 |
| Intrinsic Safety "i" | i | 2 projects under IECEx 03-5 |
| Oil Filled "o" | o | 0 |
| Pressurisation "p" | p | 1 projects under IECEx 03-5 |
| Dusts to IEC 60079-31 "t" | t | 2 projects under IECEx 03-5 |
| Dusts to IEC 61241-1 "tD" | tD | 2 projects under IECEx 03-5 |
| Dusts to IEC 61241-1-1 "DIP" | DIP | 0 |
| Other (eg non-electrical) | Ot | 0 |

## National accreditation

SIQ Ljubljana holds a national accreditation for inspection and approval of service facilities (K-002) according to SIST EN ISO/IEC 17020 from Slovenian Accreditation (SA), a member of International Accreditation Forum (IAF) and a signatory of Multilateral Agreements of the European Co-operations of Accreditation (EA).

The current SA accreditation certificate for SIQ Ljubljana is attached in Annex D and Annex F of this report. It is noted that the accreditation scope covers all the standards listed in Annex A of this report. The accreditation was last updated 23. September 2021.

The results of the last ISO/IEC 17020 audit were reviewed, and it was verified that all nonconformities relevant to the Ex department were resolved to the satisfaction of SA.

## Assessment of service facilities and issue of FARs

The assessment of service facilities and issuance of FAR is covered in INEx03. Provisions of IECEx OD-060 are included.

## Comments (including issues found during assessment)

Two certificates issued to date, no issues found.

# IECEx Conformity Mark Licensing Scheme

Not relevant for this assessment.

# ExCB for IECEx Personnel Competence Scheme

Not relevant for this assessment.

# Annexes

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

| Number | Title | Comments |
| --- | --- | --- |
| IEC 60079-0  Edition 7.0 | Explosive atmospheres - Part 0: Equipment - General requirements | Already in the scope |
| IEC 60079-1  Edition 7.0 | Explosive atmospheres - Part 1: Equipment protection by flameproof  enclosures “d” | Already in the scope |
| IEC 60079-2  Edition 6.0 | Explosive atmospheres - Part 2: Equipment protection by pressurized  enclosure “p’ | NOT IN THE SCOPE |
| IEC 60079-5  Edition 4.0 | Explosive atmospheres - Part 5: Equipment protection by powder filling “q” | NOT IN THE SCOPE |
| IEC 60079-6  Edition 4.1 | Explosive atmospheres - Part 6: Equipment protection by oil immersion “o” | NOT IN THE SCOPE |
| IEC 60079-7  Edition 5.1 | Explosive atmospheres - Part 7: Equipment protection by increased  safety "e" | Already in the scope |
| IEC 60079-11  Edition 6.0 | Explosive atmospheres - Part 11: Equipment protection by intrinsic safety “i” | Already in the scope |
| IEC 60079-13  Edition 2.0 | Explosive atmospheres -  Part 13: Equipment protection by pressurized room "p" and artificially ventilated room "v" | NOT IN THE SCOPE |
| IEC 60079-15  Edition 5.0 | Explosive atmospheres – Part 15: Equipment protection by type of protection "n" | Already in the scope |
| IEC 60079-18  Edition 4.1 | Explosive atmospheres – Part 18: Equipment protection by encapsulation “m” | Already in the scope |
| IEC 60079-25  Edition 3.0 | Explosive atmospheres – Part 25: Intrinsically safe electrical systems | NOT IN THE SCOPE |
| IEC 60079-26  Edition 3.0 | Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga | NOT IN THE SCOPE |
| IEC 60079-28  Edition 2.0 | Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation | **SCOPE EXTENSION** |
| IEC 60079-29-1  Edition 2.1 | Explosive atmospheres - Part 29-1: Gas detectors – Performance requirements of detectors for flammable gases | NOT IN THE SCOPE |
| IEC 60079-29-4  Edition 1.0 | Explosive Atmospheres – Part 29-4: Gas detectors - Performance requirements of open path detectors for flammable gases | NOT IN THE SCOPE |
| IEC/IEEE 60079-30-1  Edition 1.0 | Explosive atmospheres – Part 30-1: Electrical resistance trace heating – General and testing requirements | NOT IN THE SCOPE |
| IEC 60079-31  Edition 2.0 | Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t" | Already in the scope |
| IEC TS 60079-32-1  Edition 1.1 | Explosive atmospheres - Part 32-1: Electrostatic hazards, guidance  (may be used for testing purposes but not for issuing an IECEx Certificate of Conformity) | NOT IN THE SCOPE |
| IEC 60079-32-2  Edition 1.0 | Explosive atmospheres - Part 32-2: Electrostatics hazards - Tests  (may be used for testing purposes but not for issuing an IECEx Certificate of Conformity) | NOT IN THE SCOPE |
| IEC 60079-33  Edition 1.0 | Explosive atmospheres – Part 33: Equipment protection by special protection “s” | NOT IN THE SCOPE |
| IEC 60079-35-1  Edition 1.0 | Explosive atmospheres – Part 35-1: Caplights for use in mines susceptible to firedamp – General requirements – Construction and testing in relation to the risk of explosion | Already in the scope |
| IEC 60079-35-2  Edition 1.0 | Explosive atmospheres – Part 35-2: Caplights for use in mines susceptible to firedamp – Performance and other safety-related matters | NOT IN THE SCOPE |
| IS0 80079-36  Edition 1.0 | Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirements | Already in the scope |
| ISO 80079-37  Edition 1.0 | 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” | Already in the scope |
| IEC TS 60079-39  Edition 1.0 | Explosive atmospheres - Part 39: Intrinsically safe systems with electronically controlled spark duration limitation | NOT IN THE SCOPE |
| IEC TS 60079-40  Edition 1.0 | Explosive atmospheres - Part 40: Requirements for process sealing between flammable process fluids and electrical systems | NOT IN THE SCOPE |
| IEC TS 60079-42  Edition 1.0 | Explosive atmospheres - Part 42: Electrical safety devices for the control of potential ignition sources from Ex-Equipment  (may be used for testing purposes but not for issuing an IECEx Certificate of Conformity) | NOT IN THE SCOPE |
| IEC TS 60079-46  Edition 1.0 | Explosive atmospheres – Part 46 - Equipment assemblies | Already in the scope |
| IEC 62784  Edition 1.1 | Vacuum cleaners and dust extractors providing equipment protection level Dc for the collection of combustible dusts - Particular requirements | NOT IN THE SCOPE |
| ISO 16852  Edition 2 | Flame arrestors - Performance requirements., test methods and limits for use | NOT IN THE SCOPE |

* 1. Superseded standards

The following superseded standards may form part of a body’s scope, generally for historical reasons.

| Number | Title | Comments |
| --- | --- | --- |
| IEC 60079-27  Edition 2.0 | Explosive atmospheres – Part 27: Fieldbus intrinsically safe concept (FISCO) | NOT IN THE SCOPE |
| IEC 61241-0  Edition 1.0 | Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements | NOT IN THE SCOPE |
| IEC 61241-1  Edition 1.0 | Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosure “tD” | NOT IN THE SCOPE |
| IEC 61241-4  Edition 1.0 | Electrical apparatus for use in the presence of combustible dust - Part 4: Protection by pressurization "pD" | NOT IN THE SCOPE |
| IEC 61241-11  Edition 1.0 | Electrical apparatus for use in the presence of combustible dust – Part 11: Protection by intrinsic safety 'iD' | NOT IN THE SCOPE |
| IEC 61241-18  Edition 1.0 | Electrical apparatus for use in the presence of combustible dust - Part 18: Protection by encapsulation "mD" | NOT IN THE SCOPE |
| IEC 62013-1  Edition 2.0 | Caplights for use in mines susceptible to firedamp - Part 1: General requirements - Construction and testing in relation to the risk of explosion | NOT IN THE SCOPE |
| IEC 62013-2  Edition 2.0 | Caplights for use in mines susceptible to firedamp - Part 2: Performance and other safety-related matters | NOT IN THE SCOPE |
| IECEx DS2015/001A  2015 10 09 | Equipment assemblies | Already in the scope |

1. Overall Organisation Chart

Diagram, schematic

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1. Organisation Chart of ExCB/ExTL

Table

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1. Accreditation Certificate for ISO/IEC 17065

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1. Accreditation Certificate for ISO/IEC 17025

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1. Accreditation Certificate for ISO/IEC 17020

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