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

**TITLE: Re-assessment Report for the continued acceptance of** **Suzhou Electrical Apparatus Science Research Institute Co., Ltd. (EETI),CN, an Accepted ExTL within the IECEx Equipment Scheme 02.**

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

**INTRODUCTION**

In accordance with the 5 Year re-assessment plan for the surveillance and monitoring of bodies within the IECEx System, the following document contains the IECEx Reassessment Report for the continued acceptance of Suzhou Electrical Apparatus Science Research Institute Co., Ltd. (EETI, CN, an Accepted ExTL within the IECEx Equipment Scheme 02.

This report is hereby submitted for endorsement during the 2022 ExMC Meeting.

***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 ExTL assessment report for

**Suzhou Electrical Apparatus Science Research Institute Co., Ltd. (EETI)**

No. 5, Qinzhou Road, Yuexi, Wuzhong district, Suzhou,

Jiangsu Province, 215104 China

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

IECExTL: China

(Associated IECExCB: CQM - China)

### Name of body

**IECExTL**: Suzhou Electrical Apparatus Science Research Institute Co., Ltd. (EETI)

No. 5, Quanzhou Road, Yuexi, Wuzhong district, Suzhou,

Jiangsu Province, 215104

PEOPLES REPUBLIC OF CHINA

**Associated IECEx CB:** PEOPLES REPUBLIC OF CHINA  
China Quality Mark Certification Group Co. Ltd (CQM)

No.33 Zengguang Road,  
Haidian District,  
Beijing City,  
Postal Code:100048  
PEOPLES REPUBLIC OF CHINA

### Name and title of nominated principal contact

|  |  |  |
| --- | --- | --- |
| Name | Title | E-mail address |
| Hu Delin | President | eservice@eeti.cn |
| Li Lihuan | Vice President | eservice@eeti.cn |

## Assessment information

### Members of the assessment team

|  |  |
| --- | --- |
| Name | Role |
| Gordana Ostojic | IECEx Lead Assessor |

### Place(s) of assessment

Due to the COVID-19 pandemic related restrictions, the assessment is remotely carried out by using Microsoft Teams, IECEx OD-060 is applied for this assessment.

|  |  |
| --- | --- |
| N/A (remote audit) |  |

### Assessment date(s)

2021-07-01 (half day)

2021-07-02 (half day)

2021-07-05 (half day)

2021-07-06 (half day)

2021-07-07 (half day)

2021-07-08 (half day)

2021-07-09 (half day)

## Application information and background information on the assessment

This is Re-assessment.

## Scopes

### ExCB scope for equipment certification scheme

The scope for the ExCB fully covers the scope of IECEx TL which is shown in Annex A.

### ExTL scope

This ExTL is not integral with an ExCB but works with CQM as their associated ExCB. The scope of the ExTL is included in Annex A.

### ATF Scope – N/A

### ExCB scope for Service Facilities Scheme – 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

Suzhou Electrical Apparatus Science Research Institute Co., Ltd (EETI) is separable legal entity with unified social credit code: 91320500608202591U.

## Financial support

Registered capital: 758,3248.87 million yuan. EETI is self-supporting by way of charging fees for their services.

## History

Suzhou Electrical Apparatus Science Research Institute Co., Ltd (EETI) was founded in 1965. It is mainly engaged in testing, calibration and certification services of power generation equipment, power transmission and transformation equipment, high and low voltage electrical appliances, high and low voltage switchgear, marine electrical appliances, nuclear power appliances, machine tools electrical appliances, automotive electronics, wind power generation equipment, solar photovoltaic system, explosion-protected products, energy-saving products, ROHS, EMC, seismic and other fields.

In 1998, EETI achieved the National Laboratory Accreditation and measurement certification of China National Accreditation Council for conformity assessment. The EETI includes: China National Center for Quality Supervision and Test of Electrical Apparatus Products, China National Smart Grid Medium & High-voltage Assemblies Quality Supervision and Inspection Center, China National Center for Quality Supervision and Test of Automotive Electrical Products, Machinery Industry Product Quality Supervision and Testing Center for High and Low voltage Electrical Apparatus and Machine Tool Electrical Appliances, Machinery Industry Quality Supervision and Testing Center for Automobile Electronic and Electrical Products, The 26th measurement and testing center station of machinery industry (Suzhou).

In 2012, EETI became CB Laboratory of IECEE. In 2007, the explosion-proof laboratory of EETI began to undertake the test of explosion-protected equipment from other explosion-proof laboratories and obtained CNAS accreditation for Ex related standards. In December 2014, it passed the domestic pre evaluation of IECEx laboratory, the initial evaluation of IECEx laboratory in January 2016, and the expanded evaluation of IECEx in November 2017. In November 2018, it passed the supervision and evaluation of IECEx laboratory. On August 28, 2019, it was designated as the compulsory certification and testing laboratory for explosion-proof electrical products by CNCA. In April 2021, it passed the evaluation of national quality inspection center for explosion-proof electrical products.

## Documentation

### Quality manual

First Level of Documents

The management manual No. GJJJ-QM-C-2018, describes the management system of the EETI according to the specified quality policy and objectives, integrity objectives and commitments, and applicable management system requirements standards CNAS-CL01:2018 ISO/IEC17025:2017）, ISO 9001: 2015， IECEE 02, IECEx 02, etc. Issued on January 10, 2018 and implemented on January 25, 2018.

Section 10 of Quality Manual GJJJ-QM-C-2018 addresses IECEx certified equipment scheme procedure rules.

### Procedures

Second Level documents

The procedure documents, No. CJJJ-001~CJJJ-049/2018、CJJJ-CMS-001、~CJJJ-CMS-007/2018 (including CJJJ-047 " Application for approval of testing laboratory and system operation procedure of EXTL"), specify the methods for completing various quality / technical activities, and describe the purpose, scope of application, responsibilities, work flow, quoted documents, etc. of quality / technical activities and how to control and record the effect and integrity of the activity. The procedures meet the requirements of the IECEx Scheme 02.

### Work instructions

Third level documents

There are 67 explosion-protected operation instructions in total, which provide instructions for testing / calibration activities. They provide work instructions for testing / calibration personnel, but also to provide the necessary work evaluation standards. The Work instructions are appropriate in meeting the requirements of the IECEx system.

### Records (including test records where relevant)

CJJJ-030"record control procedure" and CJJJ-021 "technical record control procedure" are formulated to control quality records and technical records. Various records are stored and archived as combination of hard copies and electronic document. Retention period is in accordance with OD 207.

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

### Document change control

Documentation change control is addressed in section 8.3 of the management manual and CJJJ-024 "result report / certificate control procedure" and CJJJ-029 "document control procedure". The data obtained from outside are also controlled. The system meets the requirements for IECEx

## Confidentiality

Requirements for confidentiality are contained in CJJJ-002 confidentiality control procedure to protect internal data, documents, technical intelligence information, patents and key technical secrets, as well as customer property and technology secrets. The confidentiality requirements cover staff, contractors and members of advisory bodies.

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

Magazine “Electrotechnics and electrics” publishes articles on scientific research, design, standards, testing, new technologies, new industries, new materials, technical reports and technical exchanges of electrotechnics and electrics products, equipment, systems, complete sets of equipment and control equipment, computer applications in the field of electrotechnics and electrics.

## Recognitions and agreements

EETI as IECEx TL has agreement with CQM as IECEx CB.

EETI is the CB laboratory of IECEE.

Further EETI has agreements with Certification Center, China Quality Certification Center CQC, PCCC Certification Center, RoHS Certification Center, China Classification Society, CGC Certification Center, CESI Certification Center, American UL, German TUV, French BV, British Intertek Contract laboratory.

## Internal audit

Internal audit is carried out in accordance with the requirements of Management System Section 8.8 and Internal Audits, CJJJ-035 "Internal Audit Control Procedures",

The last internal audit was conducted from 25 to 27 September 2020 and internal audit activities cover all departments and all elements involved in the management system, and the internal audit basis covered ISO/IEC 17025 and ExTL system documents and requirements. A total of 9 non-conformities were identified during the audit, evidence was provided on how and all non-conformities were resolved by 30 October 2020.

The system meets the requirements of ISO/IEC 17065, 17025 and IECEx.

## Management review

Management review is carried out in accordance with the requirements of Management System Section 8.9 Management Review and CJJJ-036 "Management Review Control Procedures".

The last management review meeting was organised by the ~~top~~ manager on 15 January 2021. The management review included a full evaluation of the management review inputs and output of 8 follow-up improvement items for the following year.

The system meets the requirements of ISO/IEC 17065, 17025 and IECEx.

## Contracting, subcontracting and witness testing

### Contracting

CJJJ-013 "Control Procedures for Externally Supplied Products and Services" exist in the case if they need to do subcontracting. It includes the requirements for contracts and subcontracting in the field of explosion-proof testing, as well as the requirements for testing in non-fixed locations (OD024).

### Subcontracting

There is currently no subcontracting in the field of explosion-protection testing and no testing in non-fixed locations.

### Off-site and Witness testing

The procedure OD024 will be followed if required.

## Training and competence

Training and competence is addressed in section 6.2 of the Management Manual and CJJJ-006, Human Resources Control Procedures, for timely and effective training of personnel to enable them to continuously upgrade their skills.

Details of staff competencies are included in the site assessment report. On regular basis there is training of people in the ExCB and ExTL on the operations, outcome of audits, revised standards and procedures related to IECEx. An example of a comprehensive training session presentation was shown and was found to meet the requirements of the IECEx.

There is a competency matrix for ExCB and ExTL. This was found to be satisfactory

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

## Complaints and appeals (including appeals to IECEx)

Complaints and appeals are addressed in Management Manual section 7.9 Complaints, CJJJ-025 Control Procedures for Quality Information Feedback and Handling of Complaints, CJJJ-032 Control Procedures for Customer Communication and Customer Service, which covers the requirements for making a complaint to IECEx.

## Impartiality

Impartiality is addressed in Management Manual section 3.1 Impartiality and Integrity, CJJJ-001 Control Procedures for Impartiality, which considers factors affecting impartiality, and the Statement of Impartiality and Integrity signed by the Company's managers.

The organisational and procedural arrangements at EETI are appropriate for achieving impartiality and meets the requirements of IECEx.

## Active involvement in development of Decision Sheets

This activity is coordinated by CQM through regular meeting of all engineers and discussion about any technical issue including Decision sheets.

## Special facts to be noted

None.

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

## Recommendations

Based on the assessment performed during period from 2021-07-01 till 2021-07-09, EETI is recommended for continued acceptance in the IECEx scheme as:

* An ExTL in the IECEx Certified Equipment Scheme

This is according to the scope of the standards listed in this document including the extension of scope.

|  |
| --- |
| Gordana Ostojic |
| IECEx Lead Assessor |

Date: 2021-11-19

# ExCB for IECEx Certified Equipment Scheme – N/A

# 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

IECEx OD 060 IECEx Guide for Business Continuity – Management of Extraordinary Circumstances or Events Affecting IECEx Certification Schemes and Activities

IECEx OD 280 IECEx Certified Equipment Scheme – Guide to Certification of Non-electrical Equipment and Protective Systems

## ExTL persons interviewed

|  |  |
| --- | --- |
| Name | Position |
| Wang Wei  Chen Hong  Chen Wei  Lang Yumin  Cai He  Tang Junxian  Li Peng  Wei Hongqing  Liu Yongqin  Xu Jianlin  Jiang Qin  Wu Chao | Testing Engineer  Testing Engineer  Testing Engineer  Testing Engineer  Testing Engineer  Testing Engineer  Testing Engineer  Report Review Engineer  Report Review Engineer  Report Review Engineer  Translator |

## Associated ExCB(s)

PEOPLES REPUBLIC OF CHINA  
China Quality Mark Certification Group Co. Ltd (CQM)

No.33 Zengguang Road,  
Haidian District,  
Beijing City,  
Postal Code:100048  
PEOPLES REPUBLIC OF CHINA

## Organisation

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

|  |  |  |
| --- | --- | --- |
| Name | Title | Experience (years) |
| Hu Delin | President/ Technical Leader | From July 1978 to May 1982 Director of Laboratory, Suzhou Machine Tool & Electric Factory, engaged in testing and quality control of electrical products  From May 1982 to May 1993 Deputy Director of Suzhou Machine Tool and Electrical Factory, responsible for the whole factory production management, laboratory test management, etc..  From April 1993 to February1995 Director of the Quality Supervision and Testing Centre for Machine Tools and Electrical Products of the Ministry of Machinery Industry (Suzhou), responsible for all the work of the Centre  From March 1995 to January 2000, he was in charge of the Suzhou High-Tech Industrial Development Zone Electrical Components Testing Institute, and responsible for all the work of the testing laboratory  From February 2000 to now President of EETI，Director of China National Center for Quality Supervision and Test of Electrical Apparatus Products，Director of Machinery Industry Product Quality Supervision and Testing Center for High and Low voltage Electrical Apparatus and Machine Tool Electrical Appliances，director of Machinery Industry Quality Supervision and Testing Center for Automobile Electronic and Electrical Products. accountability for all work |

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

|  |  |  |
| --- | --- | --- |
| Name | Title | Experience (years) |
| He Xiuming | Quality manager | 1986-1994 Suzhou Electrical General Factory, product supervisor, technical section chief  1994-1998 Suzhou Machine Tool & Electrical Factory, Head of Technical Section 2  1998-1999 Suzhou Chuang Yuan Group Project Engineer, Science and Technology Department  1999～2007 Suzhou Machine Tool & Electric Factory (Co., Ltd.) Head of Technical Department, Deputy Chief Engineer  2008-2013 Director of the Technical Supervision Office, EETI  2013～Present Deputy Chief Engineer and Head of Quality, EETI |

### Other employees in ExTL activity

|  |  |  |
| --- | --- | --- |
| Name | Title/responsibility | Experience in Ex (years) |
| Liu Yongqin | Report Review Engineer | Engaged in Ex report review in December 2018 |
| Xu Jianlin | Report Review Engineer | Engaged in Ex report review in December 2018 |
| Jiang Qin | Report Review Engineer | Engaged in Ex report review in December 2018 |
| Wang Wei | Testing Engineer | Engaged in explosion proof testing in August 2010 |
| Chen Wei | Testing Engineer | Engaged in explosion proof testing in September 2011 |
| Shi Ye | Testing Engineer | Engaged in explosion proof testing in December 2018 |
| Ran Xuefeng | Testing Engineer | Engaged in explosion proof testing in May 2014 |
| Wei Hongqing | Testing Engineer | Engaged in explosion proof testing in December 2018 |
| Xulianhu | Testing Engineer | Engaged in explosion proof testing in December 2018 |
| Shixiong | Testing Engineer | Engaged in explosion proof testing in December 2018 |
| Chenhong | Testing Engineer | Engaged in explosion proof testing in May 2020 |
| Li Peng | Testing Engineer | Engaged in explosion proof testing in December 2018 |
| Tang Junxian | Testing Engineer | Engaged in explosion proof testing in December 2018 |
| Peng Zhonglin | Testing Engineer | Engaged in explosion proof testing in July 2013 |
| Qiu Xiaodong | Testing Engineer | Engaged in explosion proof testing in June 2013 |
| Zhang Jian | Testing Engineer | Engaged in explosion proof testing in September 2011 |
| Lang Yumin | Testing Engineer | Engaged in explosion proof testing in December 2018 |
| Cai He | Testing Engineer | Engaged in explosion proof testing in December 2018 |
| Chen Renzhi | Testing Engineer | Engaged in explosion proof testing in August 2010 |
| Shen Jingxi | Testing Engineer | Engaged in explosion proof testing in January 2012 |
| Chen Li | Testing Engineer | Engaged in explosion proof testing in June 2008 |
| Hu Shenshuo | Testing Engineer | Engaged in explosion proof testing in March 2011 |
| Zhang Feng | Testing Engineer | Engaged in explosion proof testing in September 2012 |
| Zhu Haihua | Testing Engineer | Engaged in explosion proof testing in November 2013 |
| Wang Yingdong | Testing Engineer | Engaged in explosion proof testing in June 2013 |
| Li Min | Testing Engineer | Engaged in explosion proof testing in December 2018 |

## Organizational structure

See Annexes A and B.

Annex A is the Scope for IECExTL - Certified Equipment Scheme.

## Resources

EETI covers an area of more than 500 mu, with a test area of 260000 square meters, more than 10000 sets of testing equipment and total assets of 4 billion yuan with more than 40 professional laboratories and 1200 engineers and technicians (300 senior technical staff, 6 national experts, 7 doctors and 65 Masters). The explosion-protected testing room of Electric Power Research Institute covers an area of 1700 square meters, and it is equipped with 150 sets of explosion-proof equipment and 26 explosion-protected test personnel.

## Test reports issued

Number of test reports (ExTRs) issued under for the preceding two years for each type of protection. For new applications these should be for national or regional schemes and for currently accepted bodies IECEx ExTRs should be shown (test reports for other schemes may also be shown):

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Standard numbers | Type of protection or other identifying information | Number of issued reports (ExTRs) (for last 2 years) | | Total |
|  |  | 2019 | 2020 |  |
| IEC60079-0:2017 | General requirements | 3 | 1 | 4 |
| IEC60079-1：2014 | Flameproof enclosures “d” | 3 | 0 | 3 |
| IEC60079-7:2015+AMD1:2017 | Increased safety ''e'' | 2 | 1 | 3 |
| IEC60079-28:2015 | Protection of equipment and transmission systems using optical radiation | 0 | 1 | 1 |
| IEC60079-31:2013 | Enclosure "t" | 3 | 1 | 4 |

## National accreditation

The national accreditation certification for ISO/IEC 17025 is shown in Annex E.

Scope of ISO/IEC 17025 accreditation covers all protections in the scope of IECExTL.

Laboratory accreditation by China National Accreditation Service for Conformity Assessment, registration number: CNAS L1020.

## Calibration

All the equipment used in the explosion protection laboratory is sent to external Calibration providers that is qualified to supply CNAS endorsed reports. All the equipment required for internal calibration are calibrated by the 26 metering stations approved by the state in EETI. The calibration of all equipment can be traced back to the international unit system (SI).

Their calibration system meets the requirements of ISO/IEC 17025 and IECEx.

## Tests witnessed during the assessment visit

The following tests were witnessed during the assessment visit:

|  |  |  |  |
| --- | --- | --- | --- |
| Standard and edition | Clause number | Test | Comments |
| IEC 60079-0 | Clause 26.4.2 | Resistance to impact | Satisfactory |
| IEC 60079-0 | Clause 26.4.5 | IP66 test | Satisfactory |
| IEC 60079-0 | Clause 26.12 | Earth continuity test | Satisfactory |
| IEC 60079-1: | Clause 15.2.2 | Determination of explosion pressure (reference pressure) | Satisfactory |
| IEC 60079-1: | Clause C.3.1.2 | Sealing test on Cable gland device with sealing ring | Satisfactory |
| IEC 60079-7 | Clause 6.10 | Terminal insulating material test | Satisfactory |
| IEC 60079-11 | Clause 10.5.3 | Temperature rise test on batteries | Satisfactory |
| IEC 60079-15 | Clause 11.3 | Restricted-breathing testing on LED lamp | Satisfactory |
| IEC 60079-18 | Clause 8.2.8 | Sealing test for built-in protective devices | Satisfactory |

## Participation in IECEx Proficiency Testing Programs

The ExTL applied for current PTB program for Flameproof joints measurements and for Small component ignition test. – Test Round 2021. Further the previous Test Round 2017 for Pressure determination was completed.

|  |  |  |
| --- | --- | --- |
| Year(s) of participation | IECEx Proficiency Testing program | General information about results |
| 2017 | Temperature Classification | Satisfied |
| 2017 | Flame Transmission FT | Satisfied |
| 2019 | Battery Testing | Satisfied |
| 2019 | Tests of Enclosures | Satisfied |
| 2021 | Flameproof joints | Enrolled |
| 2021 | Small component temperature | Enrolled |

## Comments (including issues found during assessment)

EETI has the necessary resources and quality system in place for their scope as an ExTL. There were some findings related to level of details in Test report and test records and involvement of ISO 17025 approved signatory in competency matrix. All issues were addressed to the satisfaction of the IECEx Assessor and now meet the requirements of the IECEx.

# ATF for IECEx Certified Equipment Scheme – N/A

# ExCB for Certified Service Facilities Scheme – N/A

# IECEx Conformity Mark Licensing Scheme – N/A

# ExCB for IECEx Personnel Competence Scheme - N/A

# Annexes

See Contents. (add, modify or delete annexes as necessary). Please note the following instructions for the IEC template:

1. Scope for IECExTL - Certified Equipment Scheme
   1. Current standards

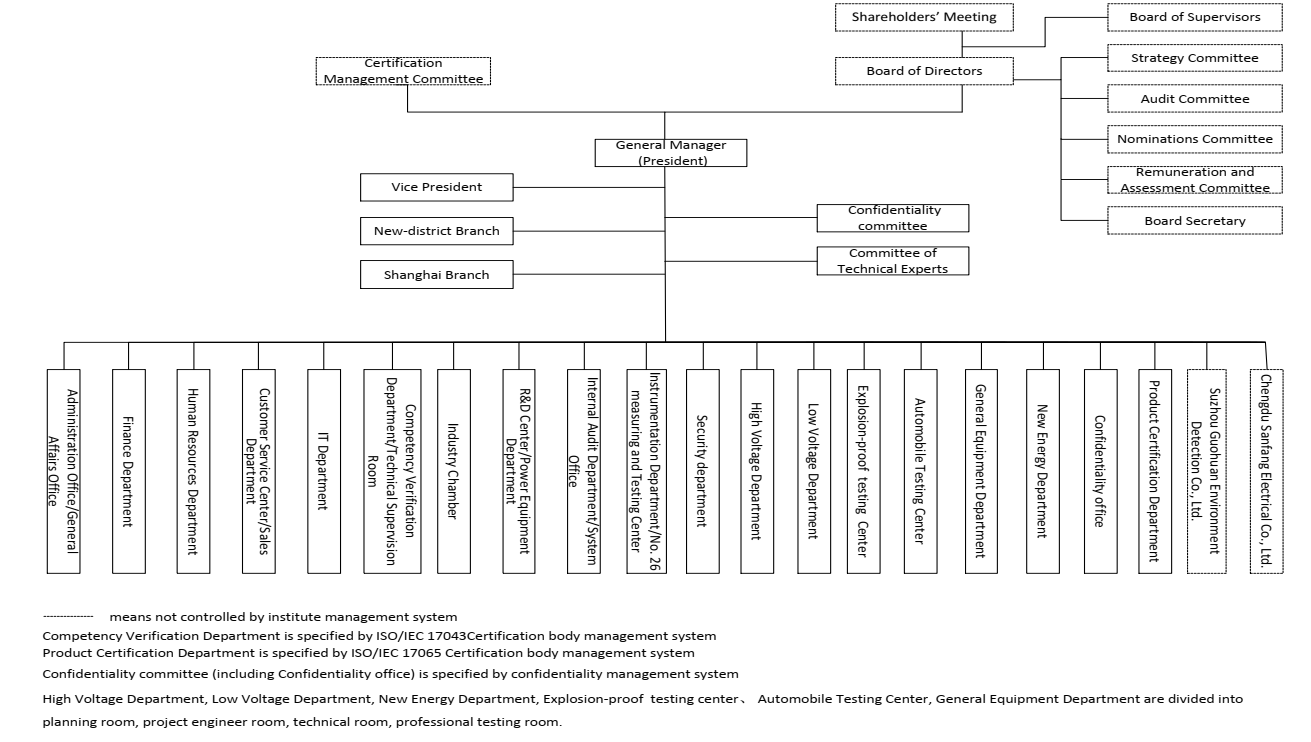
| Number | Title | Comments |
| --- | --- | --- |
| IEC 60079-0  Edition 7.0 | Explosive atmospheres - Part 0: Equipment - General requirements |  |
| IEC 60079-1  Edition 7.0 | Explosive atmospheres - Part 1: Equipment protection by flameproof  enclosures “d” |  |
| IEC 60079-2  Edition 6.0 | Explosive atmospheres - Part 2: Equipment protection by pressurized  enclosure “p’ |  |
| IEC 60079-5  Edition 4.0 | Explosive atmospheres - Part 5: Equipment protection by powder filling “q” |  |
| IEC 60079-6  Edition 4.1 | Explosive atmospheres - Part 6: Equipment protection by oil immersion “o” |  |
| IEC 60079-7  Edition 5.1 | Explosive atmospheres - Part 7: Equipment protection by increased  safety "e" |  |
| IEC 60079-11  Edition 6.0 | Explosive atmospheres - Part 11: Equipment protection by intrinsic safety “i” |  |
| IEC 60079-13  Edition 2.0 | Explosive atmospheres -  Part 13: Equipment protection by pressurized room "p" and artificially ventilated room "v" |  |
| IEC 60079-15  Edition 5.0 | Explosive atmospheres – Part 15: Equipment protection by type of protection "n" |  |
| IEC 60079-18  Edition 4.1 | Explosive atmospheres – Part 18: Equipment protection by encapsulation “m” |  |
| IEC 60079-25  Edition 3.0 | Explosive atmospheres – Part 25: Intrinsically safe electrical systems |  |
| IEC 60079-26  Edition 3.0 | Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga |  |
| IEC 60079-28  Edition 2.0 | Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation |  |
| IEC/IEEE 60079-30-1  Edition 1.0 | Explosive atmospheres – Part 30-1: Electrical resistance trace heating – General and testing requirements |  |
| IEC 60079-31  Edition 2.0 | Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t" |  |
| IS0 80079-36  Edition 1.0 | Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirements |  |
| 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” |  |

* 1. Superseded standards

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

| Number | Title | Comments |
| --- | --- | --- |
| IEC 61241-0  Edition 1.0 | Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements |  |
| IEC 61241-1  Edition 1.0 | Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosure “tD” |  |
| IEC 61241-4  Edition 1.0 | Electrical apparatus for use in the presence of combustible dust - Part 4: Protection by pressurization "pD" |  |
| IEC 61241-11  Edition 1.0 | Electrical apparatus for use in the presence of combustible dust – Part 11: Protection by intrinsic safety 'iD' |  |
| IEC 61241-18  Edition 1.0 | Electrical apparatus for use in the presence of combustible dust - Part 18: Protection by encapsulation "mD" |  |
| IEC 62086-1  Edition 1.0 | Electrical apparatus for explosive gas atmospheres - Electrical resistance trace heating - Part 1: General and testing requirements |  |

1. Overall Organisation Chart



1. Organisation Chart of ExTL

IECEx product---Director Jiang Qin，Xu Jianlin

**Yan fengli**，Cao Houyuan，Han Xuanli

**Wang Wei**，Liu Yongqin，Xu Jianlin，Chen Wei，Shi ye，Ran Xuefeng，Wei Hongqing，Xulianhu，Shi Xiong，Chen Hong，Li peng，Tang junxian，Peng Zhonglin，Qiu Xiaodong，Zhang Jian，Lang yumin，Cai he，Chen Renzhi，Shen Jingxi，Chen Li，Hu Shenshuo，Zhang Feng，Zhu Haihua，Wang Yingdong，Li min

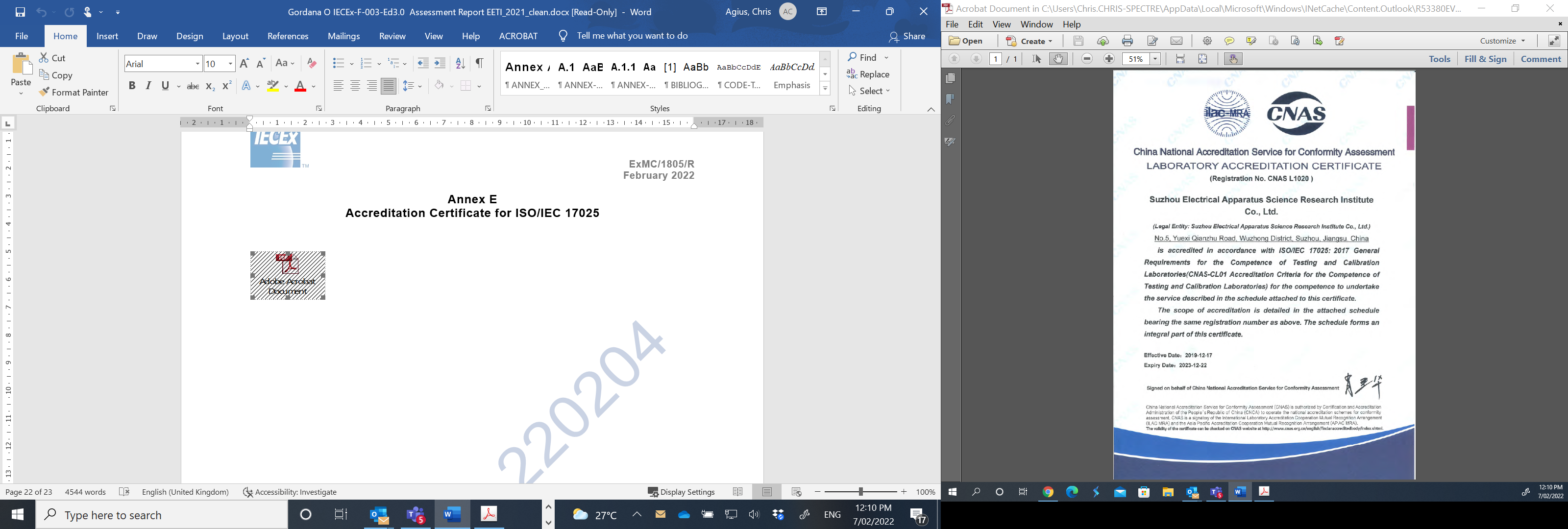
**Jiang qin**，Xu Jianlin，Liu Yongqin

Test team

Plan team

Project team/ Technical team

1. Accreditation Certificate for ISO/IEC 17065 – N/A
2. Accreditation Certificate for ISO/IEC 17025



1. Accreditation Certificate for ISO/IEC 17024 - N/A