



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

IECEx ASSESSMENT REPORT

**Title: Assessment Report for Initial Assessment of UL LLC, U.S.A, as an Accepted Ex
Certification Body (ExCB) for the IECEx 05 Certification of Personnel Competence
Scheme (CoPC)**

Introduction

This document provides a Report from the IECEx Assessment Team following the initial assessment of UL LLC U.S.A. for acceptance as an IECEx Certification Body (ExCB) for the IECEx 05 CoPC Scheme.

ExMC Members are requested to consider this Report and the Recommendation of the IECEx Assessment Team for the acceptance of UL LLC as an ExCB for the IECEx 05 Scheme and return the completed voting form, separate word document, to the Secretariat (chris.agius@iecex.com) **by 25th April 2016**

Your speedy response to the voting process will be greatly appreciated.

Chris Agius

IECEx Secretariat

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264 George Street
Sydney NSW 2000
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Body assessed	UL LLC	Date(s) of site Assessment	20 th & 21 st October 2015
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ASSESSMENT REPORT

**BODY UNDER
ASSESSMENT:**

UL LLC
333 Pfingsten Road
Northbrook, IL 60062-2096
USA

**SITE(S)
ASSESSED:**

333 Pfingsten Road
Northbrook, IL 60062-2096
USA

IECEX ASSESSMENT TEAM: Mr Ralph Wigg – IECEx Assessment Team Leader, AU
Mr Allan Ogden – Peer Assessor team member, GB

REPRESENTATIVE/S OF BODY: Ms Erin LaRocco – Senior Project Engineer - ExCB /
IECEX Personnel Competency Scheme Owner
Ms Katy Holdredge – Senior Staff Engineer – ExCB /
IECEX UL NBK Program Owner
Mr Michael Slowinske – Engineering Manager - ExTL
Manager

DATE(S) OF SITE ASSESSMENT: 20th & 21st October 2015
plus additional off-site document reviews

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IECEX 05 Certificate of Personal Competency Scheme

ASSESSMENT REPORT of

NEW IECEx APPLICANT BODY ☐

EXISTING IECEx CERTIFICATION BODY ☒

(ExCB)

ASSESSMENT TYPE:	ATTACHMENTS	No. of Pages
Application:		
Surveillance:		
Re-Assessment:		
Other:		
Assessment duration:	2 day on site plus pre and post off-site assessments	
RECOMMENDATION BY IECEx ASSESSOR(S) (Select one item only)	<input checked="" type="checkbox"/> That Acceptance be granted <input type="checkbox"/> That Acceptance be withheld/suspended <input type="checkbox"/> That Acceptance continues <input type="checkbox"/> That Acceptance be granted/continued conditional on Non Compliance/Matters raised, having agreed corrective action and time scales to rectify the System within and agreed time agreed by the Assessors	

UL LLC SCOPE ASSESSED

UL LLC have been assessed according to the requirements of IECEx05 Ed 3.0 – Certification of Personnel Competencies [CoPC] for the following Units of Competence:

Unit Ex 000 – Basic knowledge and awareness to enter a site that includes a classified hazardous area.

Unit Ex 001 – Apply basic principles of protection in explosive atmospheres

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SECTION 1. GENERAL INFORMATION

1.1 Name of Body:

UL LLC
333 Pfingsten Road
Northbrook, IL 60062-2096
USA

1.2 CURRENT IECEx PARTICIPATION:

UL LLC is an existing ExCB and ExTL for the IECEx Scheme:
IECEx Certified Equipment Scheme (IECEx 02)
IECEx Certified Service Facility Scheme (IECEx03)
IECEx Conformity Mark Licensing System (IECEx04)

1.3 DETAILS OF ASSESSOR:

Mr Ralph Wigg – IECEx Assessment Team Leader, AU
Mr Allan Ogden – Peer Assessor team member, GB

1.4 DATES OF ASSESSMENT:

On-site assessment conducted on 20th & 21st October 2016 plus off site assessments both prior and following the on-site assessment.

1.5 UL LLC PERSONNEL AT OPENING & CLOSING MEETINGS:

Ms Erin LaRocco – Senior Project Engineer - ExCB / IECEx Personnel Competency Scheme Owner
Ms Katy Holdredge – Senior Staff Engineer – ExCB / IECEx UL NBK Program Owner
Mr Michael Slowinske – Engineering Manager - ExTL Manager
Ms Erika Hannibal – Engineering Leader
Mr Jim Oates – Quality Engineering Manager
Mr Brian Gondek – ULKS Project Associate
Mr Brad Wareham – ULKS Instructional Design Specialist
Mr David Malohn – Engineering Leader
Mr Edson Ribeiro – Staff Engineer UL do Brasil (Observer)

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1.6 LOCATION OF ASSESSMENT:

The UL LLC location as stated in 1.1

1.7 UL LLC RESOURCES FOR IECEx 05 CERTIFICATION ACTIVITIES:

The Assessment team have assessed and verified the availability of competent technical staff, support staff and facilities to undertake the scope of IECEx 05 certification activities as.

1.8 RULES AND OPERATIONAL DOCUMENTS USED FOR THIS ASSESSMENT:

This assessment has used the following reference documents:

ISO/IEC 17024:2012

IECEx 05 Ed 3.0

OD 502 Ed 2.0

OD 503 Ed 3.1

OD 504 Ed 3.0.

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SECTION 2. ASSESSMENT - SUMMARY OF RESULTS

IECEX CoPC SCHEME REQUIREMENTS			Findings	COMMENTS AND REFERENCE TO ATTACHMENTS
IECEX 05 requirements	Confirmation of Scope of IECEX Acceptance or scope of application, (for scope extension)		COMPLIES	The UL LLC Scope refers directly to the Scope of IECEX05 and has embraced all 4 of the Operational Documents
	Confirmation that details in original application are still current (for new application)		COMPLIES	The details of the original application were confirmed at the opening meeting.
	Confirm currency and scope of accreditation (ISO/IEC 17024) applicable		COMPLIES	UL LLC does not hold accreditation to ISO/IEC 17024. Therefore this IECEX assessment includes assessment to ISO/IEC 17024. The subsequent assessment has verified compliance.
	Clause 9.1	(a) in a participating country	COMPLIES	U.S. is a participating country in the IECEX System
		(b) operate recognized certification scheme	COMPLIES	UL LLC already participate in the IECEX Equipment Certification Scheme
		(c) competence demonstrated by assessment	COMPLIES	IECEX Assessment included technical reviews of UL LLC staff for competence to evaluate to OD 504 relevant to the Units of Competence Ex000 & Ex001 * *see Conclusion of the Assessment and Recommendations of the Assessment Team on page 11 for additional information

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IECEX CoPC SCHEME REQUIREMENTS		Findings	COMMENTS AND REFERENCE TO ATTACHMENTS
	Assessment facilities considered by Assessment team to be appropriate and adequate for assessment of Units Ex000 & Ex001, according to OD 504	COMPLIES	The UL LLC Competence Procedures define the requirements for the knowledge skills assessment and examination including the procedures for conducting assessment and examinations. These were assessed by the assessment team and found to be satisfactory. See summary of results for OD504 for further detail..
	Confirmation of which location is the official ExCB location, where more than 1 location is identified? an official ExCB location is one where the following are conducted: <ul style="list-style-type: none"> - applications received, - contract review (review of application) - assignment of application to ExCB staff - review of exam/assessments - decision to issue Certificate (Contact IECEx Secretary for any questions)	CONFIRMED	UL LLC at 333 Pfingsten Road, Northbrook, IL 60062-2096 USA, is confirmed as the official ExCB location.
ISO/IEC 17024 Assessment–Satisfactorily Completed (for bodies without acceptable national Accreditation)		COMPLIES	The assessment team confirms that the UL LLC Quality Manual and associated Procedures, forms and Instructions comply with all aspects of ISO/IEC 17024 and IECEx requirements.

IECEX Operational Document Requirements	Findings	COMMENTS AND REFERENCE TO ATTACHMENTS
OD 502	COMPLIES	Policies and procedures did not reflect the latest version and other minor corrections required. Amended procedures have been submitted and re-assessment. This has been completed and verified as meeting all the requirements given in OD502

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IECEx Operational Document Requirements	Findings	COMMENTS AND REFERENCE TO ATTACHMENTS
OD 503	COMPLIES	<p>At the initial site assessment, a number of issues were identified with the policies and procedures that required correction.</p> <p>The requirements for questions for each Unit were found to be incomplete and not fully mapped to the outcome criteria of OD504 (see comment to OD504). Procedures have since been finalized and documented.</p> <p>This has been completed and verified. With the addition of these changes compliance with OD503 and OD 504 has now been verified.</p>
OD 504 (Review of ExCB assessment criteria including question bank, mapped against Competency Units of OD 504)	COMPLIES	<p>At initial assessment the mapping of questions to meet outcomes of OD504 was incomplete and did not demonstrate adequacy to meet minimum requirements as given in OD503. The 'language' of the questions for Unit Ex000 was considered too technical and to be simplified.</p> <p>Revised questions together with mapping has been provided and verified as acceptable.</p>

Additional Remarks concerning requirements (if any)

During the site assessment technical interviews were conducted with the proposed assessors appointed by UL LLC. Given the review of the CVs and based on the technical interviews undertaken the assessors were found to be suitable for the UL LLC scope and in addition several of the assessors were also found suitable for other Units of Competence should a scope extension be requested. This was considered to also confirm the UL LLC assessor appointment processes included within the Policies and Procedures.

Review of Examiners

The following examiners were interviewed individually in respect of the Unit of Knowledge Ex000 and Unit of Competence Ex001. It was agreed that the interviews would also be extended to establish the potential for examiners to be assigned to Unit Ex003, Unit Ex005, Unit Ex007 and Unit Ex008.

Examiner

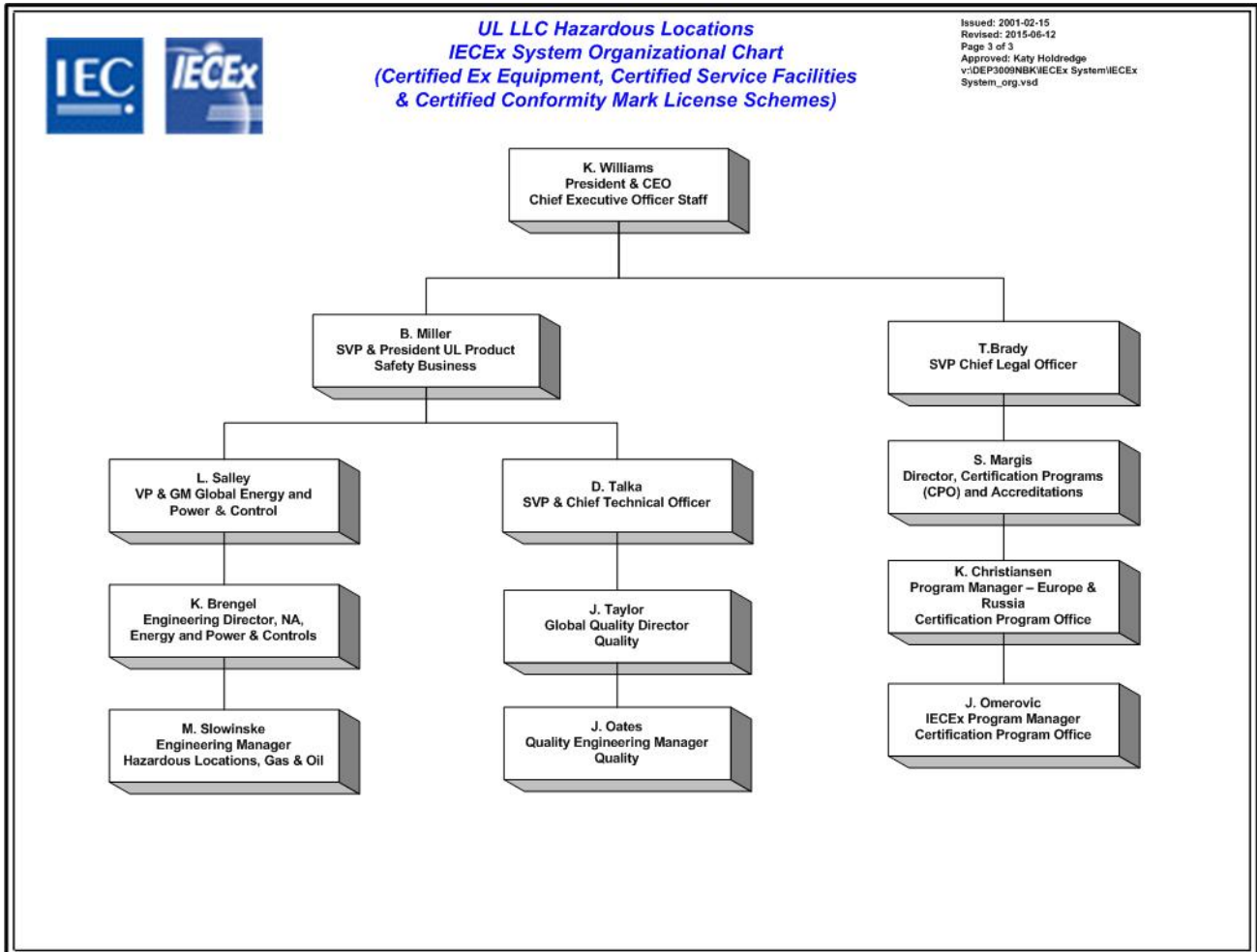
Units

Erika Hannibal	Ex000 & Ex001
Dave Malohn	Ex000, Ex001, Ex003, Ex007 & Ex008.
Robert Deadman	Ex000, Ex001, Ex003, Ex007 & Ex008.
Michael Slowinske	Ex000, Ex001 & Ex003.
Ben Shaefer	Ex000 & Ex001.
Nick Voss	Ex000, Ex001 & Ex005.
Jon Chambers	Not interviewed but accepted for Ex000 & Ex001 based on CV.
Lucy Frieders	Not interviewed but accepted for Ex000 & Ex001 based on CV.
Juan Martinez	Not interviewed but accepted for Ex000 & Ex001 based on CV.

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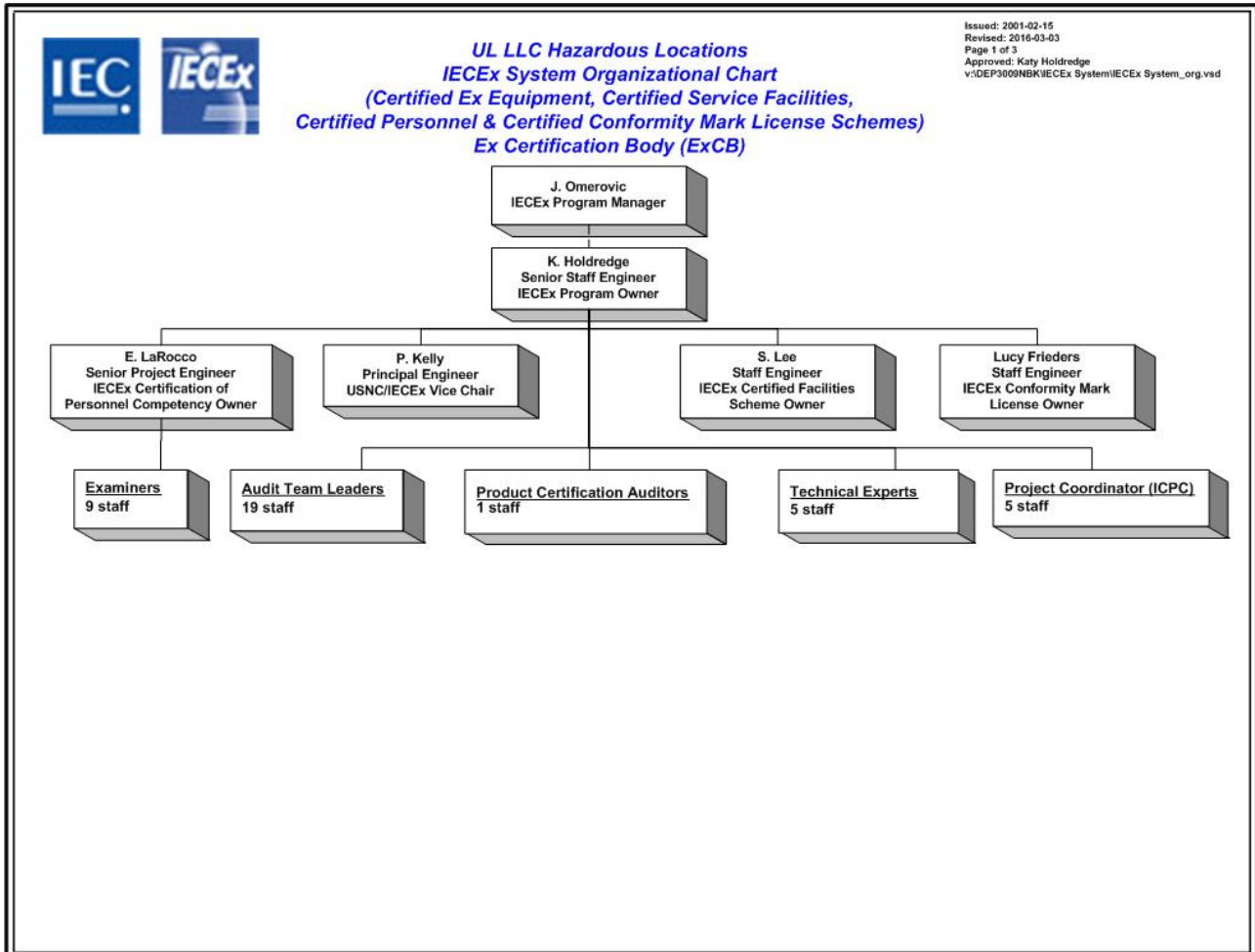
Organization Chart .

UL Overall Organization Structure



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IECEx System Organizational Chart



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Conclusion of the Assessment and Recommendations of the Assessment Team

The purpose of the site assessment was to verify compliance with the requirements of the IECEx Scheme for the scope extension and on-going acceptance of an Ex Certification Body (ExCB). The site assessment forms part of the overall evaluation of the body by the IECEx Management Committee, ExMC and was conducted in accordance with the IECEx Scheme Assessment Procedures, IECEx OD 501. In addition a re-assessment was conducted to verify that the selection of assessors, the data bank of questions being used and the suitability of examination requirements is in accordance with the requirements of IECEx05 together with OD502, OD503 & OD504. Report of the assessment team is as follows:

At the site meeting it was confirmed that UL LLC that the scope of the application is for Units Ex000 and Ex001. The Assessment Team findings indicate UL LLC has Policies, Procedures and Operational requirements in place that verify compliance with ISO/IEC 17024 and the remaining IECEx CoPC Scheme Rules and Operational Documents. As UL LLC has not been operating a Recognized Certification of Personnel Competency Scheme at a National level with ISO/IEC 17024 accreditation then this is to be included in future IECEx05 CoPC Scheme assessments until such time as National Accreditation is obtained. It is confirmed that all the documented policies and procedures are applicable for UL do Brasil.

The Policies and Procedures apply a very clear requirement for the separation of any assessors not to have been involved with any form of training with the candidate being assessed. The assessment team is satisfied this provides an adequate separation of the assessment process from training.

UL LLC procedures include the facility for conducting knowledge assessments electronically. The assessment team is satisfied that the integrity of the examinations will be maintained.

At this stage UL LLC are not yet offering Certification to the remaining Units of Competence and will require an additional assessment if the scope is to be extended.

The Assessment Team recommend UL LLC be accepted as a CoPC ExCB within the IECEx System.

R. Wigg
IECEx Assessment Team Leader
24 February 2016

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SECTION 3

Issues Raised by IECEx Assessment Team and Subsequent Responses/Actions

The following shows key issues that were raised at the site assessment/re-assessment and are included here with the resolutions, together with subsequent actions.

ISSUES RAISED AT RE- ASSESSMENT	RESPONSE FROM QPS	ASSESSMENT TEAM COMMENT
National Accreditation for ISO/IEC 17024 not available	Scheme Application altered to include ISO/IEC 17024 in IECEx assessment	Assessment Team has included the requirements of ISO/IEC 17024 in this assessment. All aspects have been reviewed and found to comply. Resolved. No further action required.
In the review of all the policies and procedures a number of corrections both of an editorial and technical nature were identified.	UL LLC to correct the documentation as agreed at the site meetings. These documents to be re-submitted within a 3 months period.	The amended documents have been provided and assessed. Resolved. No further action required.
The Question Bank was reviewed in reference to the Unit of Knowledge Ex000 and Unit of Competence Ex001. The initial overview indicates that there are sufficient numbers of questions presented to meet the requirements of the above units however the questions have been set such that with regards to Unit 000 the target audience for the assessments has not been understood and the language use is considered to be to technically based and should be reviewed	UL LLC agreed to review and resubmit	The questions have been reviewed and found acceptable to the assessment team. Resolved. No further action required.