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

Circulation to: Ex Management Committee, ExMC

TITLE: IECEx Assessment Report for an extension of scope for existing ExTL DEKRA EXAM GmbH

INTRODUCTION

This document contains the IECEx Assessment Report for voting on an extension of scope for existing ExTL, DEKRA EXAM GmbH, to include ***IEC 60079-28 Explosive atmospheres Part 28: Protection of equipment and transmission systems using optical radiation***

The report is hereby submitted for voting by ExMC

Please consider the assessment report and return the completed voting form to the Secretariat by **2008 10 09**. Your speedy response to the voting process will be much appreciated.

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IECEx Secretariat

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IECEx ASSESSMENT REPORT FOR
DEKRA EXAM ExTL
(IECEx TEST LABORATORY)

Type of Assessment: (please mark)

Scope Extension of ExTL **X**

1. OBJECT AND FIELD OF APPLICATION

1.1. ***Country:***
Germany

1.2. ***Name of Candidate ExTL***
DEKRA EXAM GmbH

1.3. ***Members of the Assessment Team***
Jim Munro Lead assessor and Chairman of the Panel of Assessors

1.4. ***Place and Date of Assessment***
18 April 2008

Carl-Beyling-Haus
Dinnendahlstr. 9
44809 Bochum
GERMANY

1.5. ***Assessment References I have updated these***

i) IECEx 02 Third Edition 2006 11 IECEx Scheme rules of procedure
ii) IECEx Operational Document OD 003 IECEx Assessment procedures
iii) IECEx Operational Document OD 009 Issuing of CoCs, ExTRs and QARs
iv) ISO/IEC 17025:2005
v) IECEx Technical Guidance Documents (TGDs)
vi) ExTAG decision sheets (DSs)
vii) ExTL application documents dated 15 October 2006

1.6. Scope of Application (to be selected)

The following scope extension is sought:

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

1.7. *Candidate TL Persons Interviewed*

Name	Position
Dr Michael Wittler	Head Expert Body for Safety of electrical Equipment - BVS
Dr Franz Eickhoff	Head of Explosion Protection
Guenther Schumann	Accredited Expert and Quality Manager
Rudolf Hauke	Head of Laboratory BVS

1.8. Legal Entity of The Candidate TL

Not covered for this scope extension.

1.9. *Associated ExCB*

The ExCB is integral with the ExTL at the same site.

1.10. *Financial Support*

Not covered for this scope extension.

1.11. History

There was a change to ownership by Dekra which occurred in 2007. There has been no direct impact from this on the Ex operation (Explosion Protection / Electro Technology). There are now approximately 82 employees in Dekra Exam. The ownership history has been WBK, DMT, EXAM and DEKRA. BVS has remained as a common identity within each ownership and appears on the certificates.

2. ORGANISATION

2.1. Names, Titles and Experience of the Senior Executives

Name	Title	Experience in Ex
Michael Wittler	Head Expert Body for Safety of electrical Equipment - BVS	16
Franz Eickhoff	Head of Explosion Protection	17
Guenther Schumann	Accredited Expert and Quality Manager BVS	33
Rudolf Hauke	Head of Laboratory BVS	28

2.2. Name, Title and Experience of the Quality Management Representative

Name	Title	Experience
Guenther Schumann	Accredited Expert and Quality Manager	33 years in Ex

2.3. Name and Title of Nominated Principal Contact

Name	Title	Comments
Dr. Michael Wittler	Head Expert Body for Safety of electrical Equipment - BVS	

2.4. Employees

Name	Title	Experience
All staff members of Expert Body for Safety of Electrical Equipment - BVS		

2.5. Organizational Structure

See Annexes 1 and 2.

3. RESOURCES

The ExTL has the necessary competent staff and facilities to test to the standard.

4. DOCUMENTATION

4.1. Quality Manual

Not covered for this scope extension.

4.2. Test Methods/Procedures

A procedure has been produced to cover this testing, PW-18-Rev00

The competency documentation has been updated to reflect staff with competency in this work.

4.3. Test Records

There are effective systems in place for recording the results of this testing and keeping the records on file.

4.4. Document Change Control

Not covered for this scope extension.

5. TEST REPORTS

5.1 Test Reports Issued

There have been about 20 certificates each year in the past (over about the last 10 years) involving optical radiation before there was a standard. They have done about 5 recent projects making use of the OP designation. But they have not done measurement of optical radiation in the past and where necessary relied on testing by others such as a local university. They have now purchased their own equipment. They used a report issued by PTB prior to the standard being issued to do correlation testing.

6. CALIBRATION

Equipment used has calibration traceable to national standards.

7. CONFIDENTIALITY

Not covered for this scope extension.

8. NATIONAL ACCREDITATION

EXAM holds accreditation from ZLS. ZLS do not list the type of protection or standards in its accreditation. However, EXAM provided evidence that ZLS does consider optical radiation to be part of the EXAM scope.

9. RECOGNITION AND AGREEMENTS

Not covered for this scope extension.

10. INTERNAL AUDIT AND PERIODIC REVIEW

Not covered for this scope extension.

11. COMPLAINTS AND APPEALS (Including appeals to IECEx)

Not covered for this scope extension.

12. SPECIAL FACTS TO BE NOTED

12.1 *Supporting Documentation*

Copies of additional supporting information for this assessment have been provided to the applicant and the IECEx Secretariat. These include:

- The site assessment report
- Completed technical guidance note (TGD) for optical radiation
- Photos of the facilities

12.2 Review of Testing Capabilities

EXAM have done about 5 recent projects making use of the OP designation. BVS certificate BVS 06 ATEX E 145 X was viewed which made use of the report from PTB mentioned elsewhere. This involved LWL diodes coupling to a fibre optic cable. The power involved was well below the allowed 15 mW for IIC. There was reasonable correlation between the results in the PTB report and the testing by EXAM.

The test equipment was demonstrated using a 3A-FS-SH head and an LML diode that had previously been reported on by PTB (with the testing subcontracted), report PTB 06-26268, and certified by BVS. Thus it was possible to demonstrate consistency of results during the assessment visit with those achieved by PTB.

Reports were reviewed that showed that steps that had been taken to introduce the test equipment into the lab.

13. COMMENTS (Including issues found during assessment)

As noted earlier, EXAM provided evidence that they have the competency and capability to operate as an ExTL for this scope extension.

No issues requiring rectification were found during the assessment.

14. RECOMMENDATION

Based on the assessment performed on 18 April 2008, EXAM is recommended for extension of scope as IECEx Testing Laboratory for the standard listed in this document.

Jim Munro

Lead Assessor

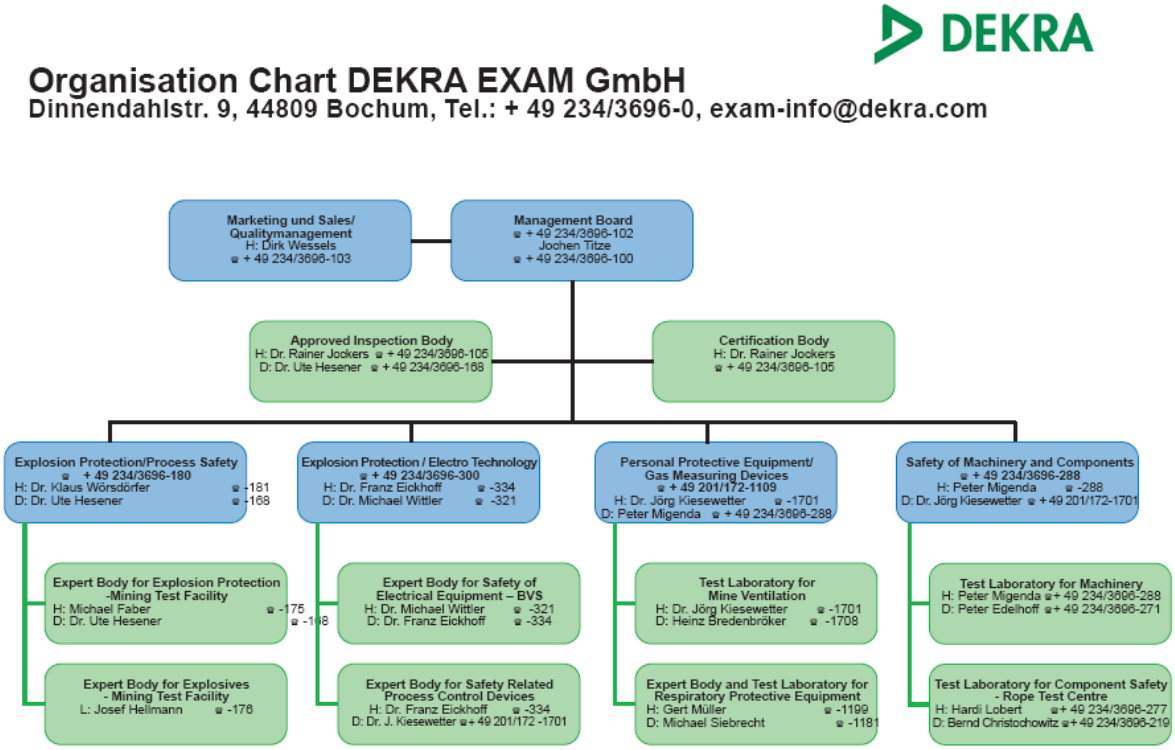
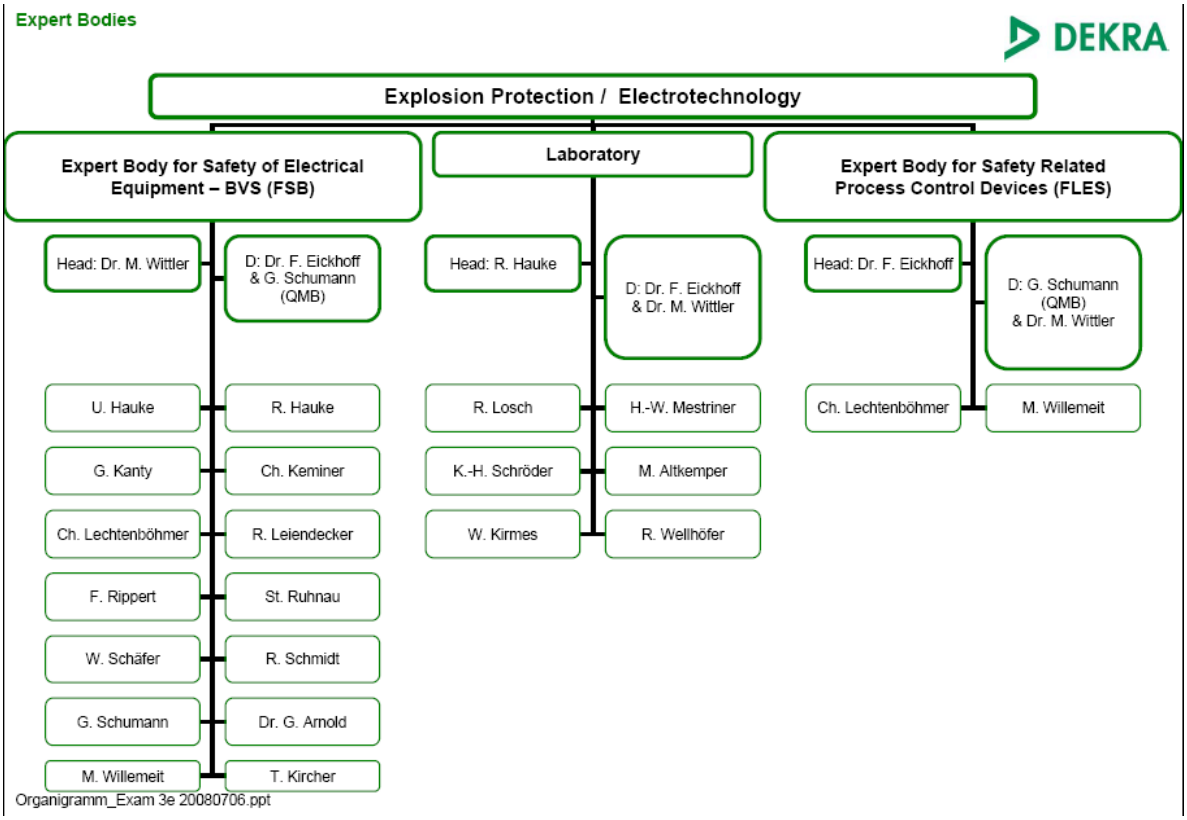
Date: 8 September 2008

List of Annexes:

1. Organization Chart of DEKRA EXAM GmbH

2. Organization Chart of Explosion Protection / Electrotechnology

Annex 1
Organisation Chart for DEKRA EXAM GmbH



Annex 2
Organisation Chart Explosion Protection/Electrotechnology