



ExMC/383/DV  
July 2007

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

**Circulation to: Ex Management Committee**

**Title: IECEx Surveillance Report for DNV, Accepted Certification Body (ExCB), and  
a request for extension to scope**

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**INTRODUCTION**

This document contains the IECEx Surveillance Report for DNV, Accepted Certification Body (ExCB). During the surveillance visit an assessment for an extension of scope was also carried out.

On this occasion, ExMC Members are asked to consider DNV's request for an extension of scope to now include

- IEC 60079-15 Ex n; and the
- IEC 61241 Dust Standards

Please complete and return the completed voting form to the Secretariat by  
**2007 09 14**

Your speedy response to the voting process will be very much appreciated.

**Chris Agius**  
IECEx Secretariat

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ExMC/383/DV  
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# IECEX SURVEILLANCE REPORT AND EXTENSION TO SCOPE FOR DNV, ExCB, NORWAY

## IECEX Accepted Certification Body (ExCB)

**Type of Assessment:** (please mark)

Initial Assessment for Candidate ExCB

Re-Assessment of ExCB

Scope Extension and Surveillance of ExCB X

### 1. OBJECT AND FIELD OF APPLICATION

**1.1. Country:**

Norway

**1.2. Name of Candidate ExCB**

Det Norske Veritas (DNV) Certification AS

**1.3. Members of the Assessment Team**

Jim Munro

**1.4. Place and Date of Assessment**

Veritasveien 1  
1322 Hovik,  
Norway

On site Assessment conducted on 23 November 2006 plus additional off-site work to review procedures and manuals.

**1.5. Assessment References**

- i) IECEx 02 Second Edition 2003-06 IECEx Scheme rules of procedure
- ii) IECEx OD/003 IECEx Assessment procedures
- iii) IECEx OD 005V2 Quality System requirements for manufacturers
- iv) IECEx OD/009 Issuing of CoCs, ExTRs and QARs
- v) IECEx Document ExMC/161/CD Management of assessment and surveillance programs for manufacturers (includes QAR forms)
- vi) ISO/IEC Guide 65:1996
- vii) IECEx Document OD 17 Drawing and documentation guidance
- viii) ExCB application documents dated 7 November 2006

### 1.6. Scope of Application

#### Existing Scope:

IEC 60079-0 Part 0: General requirements  
 IEC 60079-1 Part 1: Flameproof enclosures 'd'  
 IEC 60079-2 Part 2: Pressurized enclosures 'p'  
 IEC 60079-7 Part 7: Increased safety 'e'  
 IEC 60079-11 Part 11: Intrinsic safety 'i'  
 IEC 60079-18 Part 18: Construction, test and marking of type of protection  
 encapsulation 'm' electrical apparatus

#### Additional Scope Sought:

Number	Edition	Title
<u>60079-7</u>	Ed 3 (2006) *	Electrical apparatus for explosive gas atmospheres Part 7: Increased safety 'e'
<u>60079-11</u>	Ed 5 (2006) *	Electrical apparatus for explosive gas atmospheres Part 11: Intrinsic safety 'i'
<u>60079-15</u>	Ed 3 (2005) *	Electrical apparatus for explosive gas atmospheres Part 15: Construction, test and marking of type of protection "n" electrical apparatus
<u>61241-0</u>	Ed 1 (2004)	Electrical apparatus for use in the presence of combustible dust. Part 0: General requirements
<u>61241-1</u>	Ed 1 (2004)	Electrical apparatus for use in the presence of combustible dust. Part 1: Electrical apparatus protected by enclosures
<u>61241-4</u>	Ed 1 (2001)	Electrical apparatus for use in the presence of combustible dust. Part 4: Type of protection 'pD'
<u>61241-11</u>	Ed 1 (2005)	Electrical apparatus for use in the presence of combustible dust. Part 11: Protection by intrinsic safety 'iD'

\* To cover latest edition of standards in existing accreditation.

### 1.7. Candidate ExCB Persons Interviewed

Name	Position
Ms Line Gangeskar	Head of Section Product & Personnel Certification
Mr Bjørn Spongsveen	Service Responsible, Hazardous Locations
Mr Hakon S Hakonsen	Senior Engineer

### 1.8. Legal Entity of the Candidate ExCB

Not covered for the extension of scope.

### 1.9. Associated Testing Laboratories

The ExTL is integral with the ExCB

**1.10. Associated Certification Functions**

Not covered for the extension of scope as covered by previous assessment.

**1.11. National Marks and Certificates**

Not covered for the extension of scope as covered by previous assessment.

**1.12. Financial Support**

Not covered for the extension of scope as covered by previous assessment.

**1.13. History**

Not covered for the extension of scope as covered by previous assessment.

**1.14. Standards Accepted**

See clause 1.6 of this report

**1.15. National Differences to IEC Standards**

National differences to IEC standards are listed in the latest version of the IECEx Scheme Bulletin.

## 2. ORGANISATION

**2.1. Names, Titles and Experience of the Senior Executives**

Name	Title	Experience
Mr Arild Bruun	Country Manager, Certification	25 years (8 in DNV)
Ms Line Gangeskar	Head of Section	4 years with testing and Certification
Mr Are Larsen Otterdal	Product Certification Coordinator	13 years (13 years Ex experience)
Mr Bjorn Spongsveen	Service Responsible	17 years (all with Ex)
Mr Hakon S Hakonsen	Senior Engineer	18 years (11 years with electrical Safety and 7 years with Ex equipment)

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

Name	Title	Experience
Ms Line Gangeskar	Head of Section	As above

**2.3. Name and Title of Nominated Principal Contact**

Name	Title	Comments
Mr Bjorn Spongsveen	Service Responsible	

**2.4. Name and Title of Signatories for Certification**

Name	Title	Comments
Ms Line Gangeskar	Head of Section	
Mr Are Larsen Otterdal	Product Certification Coordinator	

## **2.5. Other Employees in ExCB activity**

<b>Name</b>	<b>Title</b>	<b>Responsibility</b>
Al Engler (in USA)		Auditor
Roy Teather (USA)		Auditor

## **2.6. Organizational Structure**

Organisation is changing to be structured on an industry focus with a matrix approach. Their section will be in the DNV Industry Branch. This will be primarily occurring in 2007. There will be no initial changes in the section but the linkage to the customer will change. A copy of the organisation chart is shown at Annex 1.

## **2.7. Administration**

### **2.7.1. Administrative Structure**

Not covered for the extension of scope as covered by previous assessment.

### **2.7.2. Indemnity Insurance**

Not covered for the extension of scope as covered by previous assessment.

# **3. RESOURCES**

There have been two new employees since the initial assessment. In addition Al Engler in the USA has been added as an auditor. There is adequate expertise for the requested extension of scope and test facilities.

# **4. COMMITTEES / Governing Board / Appeals / Advisory Board**

Not covered for the extension of scope as covered by previous assessment.

# **5. CERTIFICATION OPERATIONS**

## **5.1. National Approval/Certification Methods**

Not covered for the extension of scope as covered by previous assessment.

## **5.2. Certification Policy**

Not covered for the extension of scope as covered by previous assessment.

## **5.3. Application for Certification**

The initial review and the certification is done by Bjorn Spongsveen or Hakon S Hakonsen and they make the recommendation for certification. The certification decision is made by Line Gangeskar or Are Larsen Otterdal.

It was noted that the application form contains special terms and conditions for the IECEx Scheme.

## **5.4. Withdrawal and Cancellation of Certificates**

Not covered for the extension of scope as covered by previous assessment.

## 6. STATISTICS

### 6.1. Certificates Issued

Number of certificates issued under the IECEx, national or regional schemes in the preceding two years for each type of protection:

Product category	2005	2006	IECEx 2006
General requirements IEC60079-0 or EN50014	18	15	4
Flameproof enclosures IEC60079-1 or EN50018	6	7	4
Pressurised enclosures IEC60079-2 or EN50016	2	4	
Increased safety IEC60079-7 or EN50019	4	4	3
Intrinsic safety IEC60079-11 or EN50020	7	8	
Encapsulation IEC60079-18 or EN50028	2	2	

## 7. DOCUMENTATION

### 7.1. Quality Manual

Only reviewed for aspects covered by this assessment visit.

### 7.2. Procedures

Procedures have been developed for all the techniques covered by the extension of scope.

### 7.3. Work Instructions

In addition to higher level procedures they have equipment operating procedures.

### 7.4. Records

The record keeping appeared satisfactory.

### 7.5. Document Change Control

Not covered for the extension of scope as covered by previous assessment.

## 8. CONFIDENTIALITY

Not covered for the extension of scope as covered by previous assessment.

## 9. PUBLICATIONS

Not covered for the extension of scope as covered by previous assessment.

## 10. NATIONAL ACCREDITATION

DNV had an audit by Norwegian Accreditation (NA) prior to the IECEx visit so they could obtain accreditation. A copy of the certificate from the NA audit, number PROD 002, has now been issued and is attached at Annex 2. Now that DNV have accreditation as a certifying body, there should be no need for future surveillance visits for the ExCB.

## **11. RECOGNITION AND AGREEMENTS**

Not covered for the extension of scope as covered by previous assessment.

## **12. INTERNAL AUDIT AND PERIODIC MANAGEMENT REVIEW**

Not covered for the extension of scope as covered by previous assessment.

## **13. SUBCONTRACTING, USE OF OTHER LABS AND USE OF OTHER LOCATIONS**

The resistance to light test will be subcontracted to SP in Sweden which is an accepted ExCB and ExTL.

## **14. TRAINING**

For the additional standards, there are discussions in group meetings of people who will be involved. There is a qualification matrix for personnel involved in Ex activities. This covers the existing and additional scope. There is a qualification form that has to be completed and signed when a person is deemed competent to apply a particular standard. A new system is being implemented using the software system PeopleSoft.

## **15. ASSESSMENT OF MANUFACTURERS AND ISSUE OF QARS**

Hakon Hakonsen does the auditing of manufacturers as a general rule. This will include the standards in the extended scope. Bjorn Spongsveen can also do auditing. There are also auditors in USA that can do auditing for the IECEx. In addition there are auditors in India and Italy who currently do ATEX auditing.

A sample QAR NO/DNV/QAR06.002/00 was viewed and found to be very comprehensive.

## **16. COMPLAINTS AND APPEALS (Including appeals to IECEx)**

Not covered for the extension of scope as covered by previous assessment.

## **17. SPECIAL FACTS TO BE NOTED**

### **17.1. Supporting Documentation**

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

- Details of issues raised and how these have been resolved
- Checklist for ISO/IEC Guide 65
- Notes from the assessment
- Technical Guidance Documents covering the new Standards for Ex n and Dusts completed for the ExTL assessment

### **17.2. Review of Files**

A review was made of a file relating to NO/DNV/QAR06.0002/00 and Certificate IECEx DNV 06.0002 covering Ex d and Ex e.

## **18. COMMENTS (Including issues found during assessment)**

Some issues were found during the assessment including updating of qualification forms, competency matrix and recommendation form, and identification of



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subcontracting. Details of these and how they were resolved to the satisfaction of the assessor are contained in the site report, which is retained on file at the IECEx Secretariat.

## **19. RECOMMENDATION**

Based on the assessment carried out on 23 November 2006, it is recommended the scope of DNV as an ExCB be extended to include the additional standards shown in Clause 1.6.

Given the level of experience in conducting assessments to IEC 60079-15 and dusts, it is recommended that the first certificate and associated QARs issued for Ex n and Dusts be a reviewed.

Jim Munro  
Lead Assessor

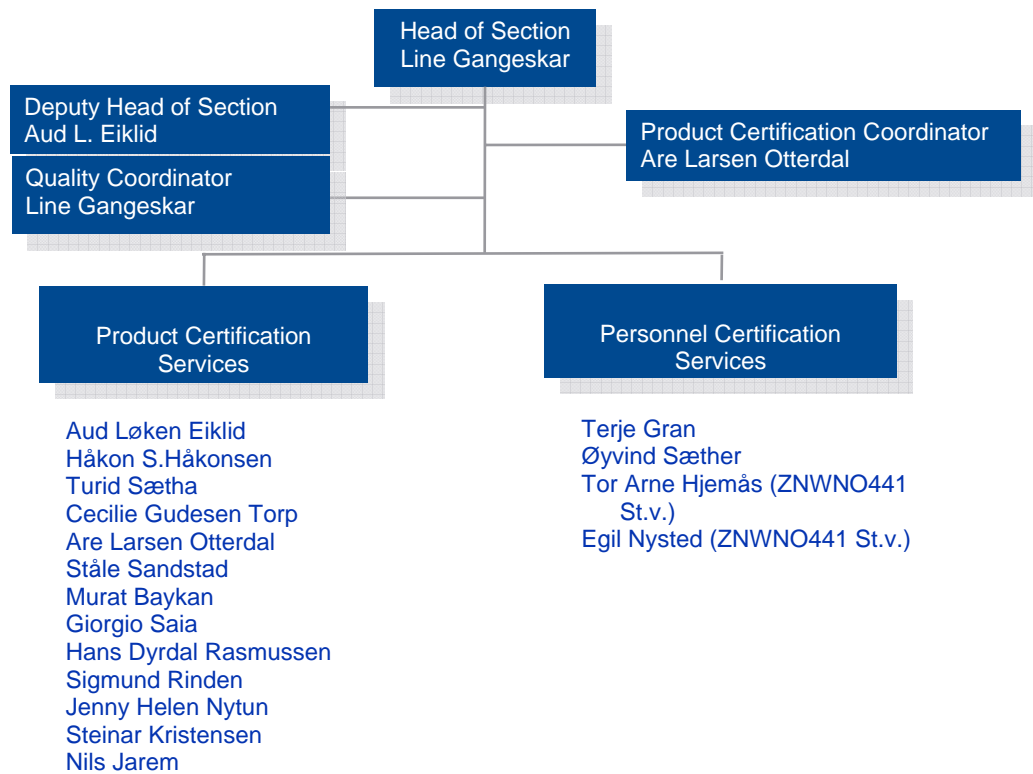
Date: 12 May 2007

## **List of Annexes:**

1. Organization Chart of DNV Certification
2. Certificate of Accreditation



## Annex 1 Organization Chart of DNV Certification





# AKKREDITERINGSDOKUMENT

**Akkrediteringsnummer PROD 002**

**Det Norske Veritas Certification AS**

**Veritasveien 1  
1322 HØVIK**

Akkrediteringen omfatter sertifisering av produkter innenfor omfanget som er spesifisert på den neste siden(e) i dette dokumentet.

Akkreditering i henhold til NS-EN 45011 (1998) er gitt i overensstemmelse med Stortingsprop. nr. 106(1989/90) og Norsk Akkrediterings statutter fastsatt i Kgl. resolusjon 7. oktober 1993.

Akkrediteringen forutsetter regelmessig oppfølging og er gyldig til 01.06.2008.

Akkrediteringsbeslutningen innebærer at Norsk Akkreditering har funnet at organisasjonen oppfyller kravene for akkreditert virksomhet innenfor de angitte akkrediteringsområder. Organisasjonen står selv ansvarlig for utførte sertifiseringer.

NORSK AKKREDITERING

1/6-07  
Dato

Ave Mending  
Norsk Akkreditering





**Akkrediteringsdokument**  
**Akkreditering nr. PROD 002**  
**Fortegnelse over akkrediteringens omfang**

Den administrative/geografiske enheten:

**Det Norske Veritas AS, Business Area Maritime, MTPNO 370**  
**Veritasveien 1**  
**1322 HØVIK**

er akkreditert for sertifisering av produkter i henhold til følgende normative dokumenter:

Produkter/ Normativt dok.	Kompetanseområde/Tilhørende tekst	Sert. system ISO Guide 67	Merknader
Council Directive 96/98/EC Marine equipment Annex A.1/1	Live saving appliances	1B,5	
Council Directive 96/98/EC Marine equipment Annex A.1/2	Marine-pollution prevention	1B,5	
Council Directive 96/98/EC Marine equipment Annex A.1/3	Fire protection	1B,5	
Council Directive 96/98/EC Marine equipment Annex A.1/4	Navigation equipment	1B,5	
Council Directive 96/98/EC Marine equipment Annex A.1/5	Radio-communication equipment	1B,5	

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Ane Overdug  
Norsk Akkreditering





**Akkrediteringsdokument**  
**Akkreditering nr. PROD 002**  
**Fortegnelse over akkrediteringens omfang**

Den administrative/geografiske enheten:

**Det Norske Veritas Certification AS, Business Area Industry, ZNYNO400**  
**Veritasveien 1**  
**1322 Høvik**

er akkreditert for sertifisering av produkter i henhold til følgende normative dokumenter:

Produkter/ Normativt dok.	Kompetanseområde/Tilhørende tekst	Sert. system ISO Guide 67	Merknader
Alarm systems	Intrusion systems	1B,5	
British Retail Consortium (BRC) Global Standard - Food (2005)	Technical Standard for Companies Supplying Retailer Branded Food Products	5	Scope according to Requirements for organisations offering certification against the criteria of the British Retail Consortium Global Standards, field no 1-6
Directive 94/9/EC	Equipment and protective systems intended for use in potentially explosive atmospheres	1B,5	Directive 94/9/EC Annex III, IV, V, VI, VII, IX, Art.8.1 (b) (ii)

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*Arve Menden*

Norsk Akkreditering