



ExMarkCo/12/CD
April 2008

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**IEC SCHEME FOR CERTIFICATION TO STANDARDS RELATING TO
EQUIPMENT FOR USE IN EXPLOSIVE ATMOSPHERES (IECEX SCHEME)**

Report: to the IECEX ExMarkCo Committee members:

Subject: Consideration of the acceptance of ExCB TestSafe Australia
(TSA) to issue IECEX Conformity Mark Licenses.

Introductory Note

This document provides a report to ExMarkCo Members concerning the application from TSA of Australia to be accepted as an IECEX Conformity Mark License issuing ExCB.

ExMarkCo Members are therefore requested to review this report and attached documents and submit comments to the Secretariat as follows, by the closing date **24 April 2008**.

If no comments are received by the due date it will be assumed that the application is acceptable and a report will be prepared and submitted to the ExMC for formal voting.

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ExMarkCo/12/CD
April 2008

Background

The IECEX Secretariat has received an application from TSA, Australia to become an IECEX Conformity Mark License issuing ExCB

This application was received by the IECEX Secretariat in accordance with IECEX 04 and OD 022.

The application and associated documents are attached.

In accordance with IECEX OD 022, the IECEX Secretariat has conducted a detailed review of the TSA documentation supplied and has compiled the following report and recommendations for consideration by the IECEX ExMarkCo Committee members.

Observations and Findings

A full review of the TSA documentation according to the IECEX Requirements of Clauses 1.1 and 2.4 of OD 022 was carried out as follows:

Item 1.1 (of OD 022) ExCB Requirements <i>An ExCB seeking to make application for a license from IEC to issue IECEX Conformity Mark Licenses shall;</i>	Result
a) Have been accepted as an IECEX Certification Body (ExCB) in accordance with the IECEX Rules of Procedures IECEX 02 and supporting Operational Documents and Procedures	Yes, TSA is a current ExCB and operating continuously since first appointed in October 2002
b) Have current acceptance as an ExCB;	Yes
c) Agree to abide by the IECEX Conformity Mark Regulations and Operational Procedures and decisions of the IECEX Management Committee	Yes, TSA have formally agreed to abide by all Rules and operational procedures
d) Nominates a senior officer who shall act on behalf of the ExCB in matters	Yes, the Senior officer has been nominated



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relating to the IEC License	
e) Sign a License agreement	Agreed to sign once formal acceptance is Received
Item 2.4 (of OD022) Procedure for an ExCB issuing IECEX Conformity Mark Licenses	Yes, TSA has provided copies of their procedures to issue an IECEX Conformity Mark. These procedures are being reviewed as part of the ExMarkCo assessment process to determine if they comply with IECEX requirements including all steps and stages detailed in Table 2 of OD 022. This includes incorporation of the IECEX Standard Terms and Conditions, OD 023 into the TSA requirements that will be placed on holders of an IECEX Conformity Mark License.

TSA, since being accepted as an ExCB in the IECEX Scheme, has produced a total of 501 CoCs and associated reports.

Recommendation

The IECEX Secretariat now recommends that this application be accepted subject to the review by ExMarkCo Committee Members by correspondence.

Action required of the IECEX ExMarkCo Committee members

The IECEX ExMarkCo Committee members Officers are asked to review the report and attached documents and support the Secretariat's recommendations of accepting the application from TSA to become an IECEX Conformity Mark License issuing ExCB.



**INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC SCHEME FOR
CERTIFICATION TO STANDARDS FOR SAFETY OF ELECTRICAL EQUIPMENT
FOR EXPLOSIVE ATMOSPHERES (IECEX SCHEME)**

**Title: Application from TestSafe Australia (TSA) for approval to issue the
IECEX Conformity Mark License.**

Circulated to: Members of the IECEx Conformity Mark Committee, ExMarkCo

INTRODUCTION

The IECEx Secretariat is pleased to advise that an application has been received from the TestSafe Australia (TSA), an accepted ExCB within the IECEx Scheme, for approval to issue the IECEx Conformity Mark License.

This document is issued for consideration, by correspondence, by the IECEx Conformity Mark Committee, ExMarkCo, in accordance with IECEx 04 - IEC Scheme for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX Scheme) – IECEx Conformity Mark Licensing System – Regulations.

A review of TSA's application, prepared by the IECEx Secretariat, is attached.

Address: IECEX Secretariat 286 Sussex Street Sydney NSW 2000 Australia	Tel: +61 2 8206 6940 Fax: +61 2 8206 6272 Email: chris.agius@iecex.com Internet: www.iecex.com
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APPLICATION FROM TestSafe Australia (TSA)

TestSafe would like to make an application to the IECEx for an IEC License agreement to enable the issuing of IECEx Conformity Mark Licenses to our IECEx certificate holders.

This has the approval of our Director, Peter Harley, who is copied in this application.

We are currently documenting an internal procedure to define the measures involved in the issuing and control of the IECEx Conformity Mark License and this should be issued within the next two week.

It would be appreciated if this could be accepted as the application, with the formal internal procedure to be forwarded shortly.



GGP043

TestSafe Australia

919 Londonderry Road, Londonderry NSW 2753

Procedure for IECEx Conformity Mark License

This Work Instruction is issued subject to the provisions of the Quality Management System of TestSafe Australia

Original Issue
Issue Date: 17 March 2008

This document was prepared by:

Ujen Singh
Manager, Quality & Certification

Signature: 

Date: 11 March 2008

This document was checked by:

Ajay Maira
Manager, Electrical Low Current Branch

Signature: 

Date: 13 March 2008

This document was authorized for release by:

Peter Harley
Director, TestSafe

Signature: *Peter Harley*

Date: 17 March 2008

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Revision Record

Revision Number	Detail of Revision	Issue Date
0	Original Issue	17.03.2008
1		
2		
3		
4		
5		
6		
7		
8		
9		

1. Scope and Purpose

This procedure applies to the IEC Scheme for Certification to Standards relating to Equipment for use in Explosive Atmospheres (IECEX Scheme) – IECEX Conformity Mark Licensing System.

It outlines the general requirements from application, administration, through to issuing and maintaining the Mark License. This procedure also covers the appeal process and cancellation of the License, where necessary.

The procedure has been prepared to align with the general requirements of the IECEX Scheme, as specified in IECEX 04 and related IECEX Operational Documents.

2. References

IECEX OD022	Rules and Procedures for the granting of Licenses to issue and use the IECEX Conformity Mark
IECEX OD023	Terms and Conditions for use of the IECEX Conformity Mark
IECEX04	IECEX Conformity Mark Licensing System – Regulations

3. Terms and Definitions

For the purpose of this document, the terms and definitions given in the IECEX Scheme shall apply.

4. Procedure

Procedure to issue License for use of the IECEX Conformity Mark.

4.1 Application from the Manufacturer

TestSafe receives an application for use of an IECEX Conformity Mark from a manufacturer, who is the holder of a current and valid IECEX Certificate of Conformity.

The TestSafe application form for the IECEX Mark License is available on our website, www.testsafe.com.au

The application from the manufacturer should consist of:

- a) A copy of the manufacturer's internal procedure(s) for use, display and control of the IECEX Conformity Mark;
- b) Manufacturer's controlled document detailing the design of the IECEX Conformity Mark as proposed by the manufacturer (usually in the form of a manufacturer's drawing);

- c) The signed License agreement between the Manufacturer and TestSafe which shall include reference to the Manufacturer's agreement with the IECEx Terms and Conditions. The License Agreement form is available on the TestSafe website, www.testsafe.com.au

4.2 Assessment of Application

On receipt of an application from the Manufacturer, TestSafe shall conduct an assessment of the application to ensure that the following requirements are met:

- a) The application information is complete;
- b) The application for an IECEx Conformity License identifies current Ex products covered by IECEx Certificates of Conformity;
- c) The IECEx certificate(s) mentioned in the application are current and valid. This shall be confirmed by checking on the IECEx website;
- d) The License Agreement has been signed by a duly authorized representative of the Manufacturer who shall be a member of the management of the manufacturing organization.

Where these requirements have not been met, TestSafe shall inform the Manufacturer who may then arrange for review and re-submission of their application.

The assessment of the application is under the responsibility of the Q & C Manager, or delegate.

4.3 Processing the Application

On completion of the application assessment, a new WCA Job File and Job Number is to be created for the manufacturer for the issue of the Mark License. A quotation for this work is to be completed and the quotation letter sent to the client (Manufacturer), and a copy of the letter placed in this Job File.

4.4 Assessment of the Manufacturer's Procedures

The Q & C Manager, or delegate, conducts an assessment of the manufacturer's procedures for compliance with the IECEx rules and operational documents. This assessment shall include the following:

- a) Ensuring the manufacturer's procedures require that the IECEx Conformity Mark is only associated with products covered by current and valid IECEx Certificates of Conformity listed in the application;
- b) A review of promotional material where the IECEx Conformity Mark is likely to be used to ensure that IECEx and IEC rules have been complied with;
- c) Identification of the manufacturer's personnel with responsibility and authority to control use of the Mark within the organisation;
- d) Ensuring the requirements of OD023, OD022 and IECEx04 are met.

Such an assessment may be conducted at the manufacturer's premises, at TestSafe, or could be included in an IECEx surveillance visit of a manufacturer, or a combination of the above.

Where the result of the assessment is negative, TestSafe shall request that the manufacturer submit additional or revised information and documentation for further review.

4.5 Manufacturer's Mark design

An important part of the documentation assessment described in section 4.4 above is the evaluation of the manufacturer's proposed Mark design. This proposed design shall be submitted by the manufacturer with the application in the form of a controlled document, usually in the form of a drawing. The proposed Mark drawing shall be assessed by TestSafe against the requirements of the IECEx Scheme documents, in particular IECEx 04, Annex A.

On completion of this assessment and if the Mark design is acceptable, TestSafe shall authorize the use of the Mark design by stamping the manufacturer's controlled drawing, maintaining a stamped copy on the WCA File for TestSafe's records. The authorized stamped drawing is then forward to the manufacturer.

Where the Mark design assessment is unsuccessful, the Manufacturer shall be requested to resubmit a revised document showing a modified Mark design for further review by TestSafe.

4.6 Issuing the IECEx Conformity Mark License

If all the information and activities described above are found to be acceptable, TestSafe will issue the IECEx Conformity Mark License to the manufacturer by counter-signing the License Agreement and providing a copy to the applicant manufacturer. TestSafe's signed copy of the License Agreement shall be maintained in the WCA file for the manufacturer. In addition, TestSafe shall undertake the following steps:

- a) Register the License Certificate on the IECEx website;
- b) Update TestSafe's quality surveillance procedures and audit plans for that manufacturer to include ongoing assessment and review of the manufacturer's compliance with the IECEx Conformity Mark License rules as defined in relevant IECEx documents. Quality surveillance auditing is further defined in the TestSafe Quality Assessment Manual, GGP028.

5. Appeal Process

If, after evaluation of the application, the manufacturer is denied the use of the Mark License, the manufacturer may appeal this decision by TestSafe. This appeal process is similar to the process for appealing decisions on product certification and is described in TestSafe procedure GGP022.

6. Cancellation of License

The conditions under which TestSafe may cancel the IECEx Conformity Mark License include the following:

- a) The manufacturer has used the IECEx Conformity Mark on product not covered by current and valid IECEx certification.
- b) The manufacturer has altered or modified the authorized design of the Conformity Licence Mark without the prior approval of TestSafe.
- c) IECEx certificates of conformity covered by the IECEx Conformity Mark License have been suspended or cancelled and the manufacturer has not removed reference to these certificates.

Procedure to Issue IECEx Conformity Mark License

- d) TestSafe may refuse to allow a manufacturer from permitting a third party from using the IECEx Conformity Mark, where TestSafe determines that the conditions of the IECEx Conformity Mark License Scheme may be compromised. The Mark License issued to the manufacturer may be cancelled under these circumstances.
- e) Mark Licence fees or any other certification-related fees due by the manufacturer or any third party have not been paid to TestSafe by the stipulated period
- f) Any reason where TestSafe determines that the conditions of the IECEx Conformity Mark License Scheme may be compromised.



GGP022

TestSafe Australia

919 Londonderry Road, Londonderry NSW 2753

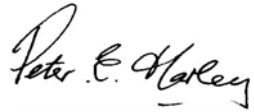
Appeals Procedure

This Work Instruction is issued subject to the provisions of the Quality Management System of TestSafe Australia

Revision No: 4
Issue date: 13 March 2008

This document was authorised for release by:

Peter Harley
Director



Date: 13 March 2008

This document was prepared by:

Ujen Singh
Quality & Certification Manager

Signature: 

Date: 13 March 2008

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Revision Record

Revision Number	Detail of Revision	Issue Date
0	Original Issue	April 2002
1	Reissued due to minor changes	November 2002
2	New Director, updated Feedback procedure	17.08.2004
3	Added: Appeals wrt the IECEx Scheme	08.04.2005
4	Added appeals for IECEx Mark License	11.03.2008
5		
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9		

1. Definitions

- 1.1. Appellant: The person or organization appealing against the TestSafe decision not to grant [product certification](#) or [authority to use the IECEx Mark](#).
- 1.2. Appeal: A formal expression of dissatisfaction by an applicant for refusal by TestSafe to grant Australian certification for their product, [or authority to use the IECEx Mark](#).
- 1.3. Appeals Panel: The group of people examining and ruling on the appeal.
- 1.4. TestSafe means TestSafe Australia: an approved ACB

2. Scope

This procedure includes the process for an appellant to appeal against a decision by TestSafe not to grant product certification to the [IECEX](#) , AUSEx or ANZEx 'Explosion Protected Electrical Certification Schemes', [or authority to use the IECEx Mark](#).

3. The Appeals Panel

The panel is made up of the members of the 'Independent Certification Committee' which oversees TestSafe's certification functions outlined in procedure GGP020. No member of the panel should have a commercial or other relationship with the appellant.

4. How to lodge an Appeal

- 4.1. Before an appeal is lodged the appellant must first use TestSafe's normal feedback process and this feedback must be in the form of a written complaint to the management of TestSafe. The Feedback procedure CSWI002 should be used to try and resolve the complaint.
- 4.2. The appeals process is available for applicants who have failed to have their product certification, [or authority to use the IECEx Mark](#), refusal resolved by the feedback process.
- 4.3. An appeal shall be lodged by sending a substantiated letter of appeal by registered mail or equivalent to the Director of TestSafe. The Director will notify the Chairperson of the 'TestSafe Certification Committee' of the lodged appeal.
- 4.4. The letter of appeal should be lodged within thirty (30) days of receiving a letter/[notice](#) of refusal to certify the product, [or authority to use the IECEx Mark](#), based on the feedback process.
- 4.5. Together with the letter of appeal the appellant will forward a deposit of \$500 to cover costs, which might be incurred in respect of the appeal, if costs of less than \$500 are incurred the balance will be returned to the appellant.
- 4.6. The appellant has the right to formally present its case if it so desires and this request must be included in the letter of appeal.
- 4.7. [In the case of appeals wrt IECEx certification, it must be brought to the attention of the appellant that they have a further right to an appeal under the IECEx Scheme rules, refer IECEx Scheme document: IECEx 01: Basic Rules, available from the IECEx website.](#)

5. Confidentiality

The members of the panel shall be placed under an obligation of confidentiality concerning anything that might come to their knowledge

during their appeals panel functions, in relation to the certification body, appellant or their customers.

6. Appeals Process

- 6.1. The panel outlined in this procedure will examine the appeal based on all of the evidence provided by the appellant and TestSafe.
- 6.2. The panel has the right to consult experts and to take all measures and make provisions, including the convening of one or more sessions, deemed necessary for a sound judgment.
 - 6.2.1 Any person involved with the investigation of a complaint, appeal or dispute must not have had any involvement in the design, consultancy or any aspect of assisting the certification required by the applicant or supplier in question, or any body related to the supplier within the last two years.
- 6.3. A decision on whether to grant the appeal or not will be determined by a majority vote of the panel.
- 6.4. Within five (5) working days of a decision by the panel all affected parties will be notified in writing.

7. Appeals Register

A record of all appeals and their outcomes will be kept by TestSafe.

8. Subsequent actions

- 8.1 In cases involving non-conformity of products corrective action will be undertaken to:
 - a. Minimize the consequences of any non-conformity.
 - b. Initiate action to restore conformity of the product.
 - c. Modify or implement systems where necessary to prevent recurrence the non-conformity.
 - d. Follow up and assess the effectiveness of the corrective action.
- 8.2 All subsequent actions initiated will be documented in the job file.

License Agreement: IECEx Conformity Mark

LICENSE AGREEMENT

Between

TestSafe Australia

And

.....

Relating to

The granting of the IECEx Conformity Mark License

**For the IECEx certified product(s): As defined in the Application Form
and associated ADDENDUM for the complete listing of IECEx
Certificates and product descriptions.**

AGREEMENT

This Agreement is made on[date] by and between:

TestSafe Australia, located at 919 Londonderry Road, Londonderry, NSW, Australia
(hereafter referred to as '**TESTSAFE**')

And

.....[Name of the Applicant], with offices at

.....[Address]

(herein after referred to as '**the Applicant**')

TESTSAFE and the Applicant are hereafter sometimes referred to as 'The Parties' or
separately referred to as 'a Party'.

Whereas:

- a. **TESTSAFE**, an accepted IECEx Certification Body (ExCB) in accordance with IECEx 02 and an IECEx Conformity Mark License issuing body authorised to license the use of the IECEx Conformity Mark in accordance with IECEx Conformity Mark Regulations, IECEx 04, and Rules and Procedures detailed in IECEx Operational Document OD022, as amended.
- b. **The Applicant**, after a successful assessment process, will become a **Holder** or **Licensee**.

Terms and Definitions

Applicant means an individual or body applying for an IECEx Conformity Mark License.

Holder means a person or legal entity identified on the IECEx Conformity Mark License, usually a manufacturer, as the party responsible for complying with all the requirements of these Terms and Conditions. For the purpose of this document, the term ‘Holder’ and ‘Licensee’ are interchangeable.

License means a document issued by TESTSAFE authorising a Licensee to use the IECEx Conformity Mark. The License lists or makes reference to the IECEx Certificate(s) of Conformity covering Ex Products(s) in relation to which the IECEx Conformity Mark may be used. The TestSafe Mark License Addendum contains the complete listing of IECEx Certificates and product descriptions that relate to the Conformity Mark License.

Licensee means an Applicant to whom an IECEx Conformity Mark License is issued under these Terms and Conditions. For the purpose of this document, the term ‘Holder’ and ‘Licensee’ are interchangeable.

Product means the Ex product covered by an IECEx Certificate of Conformity issued in accordance with the IECEx Scheme Rules for Certified Equipment, and listed on the IECEx Conformity Mark License.

Surveillance means a programme of activity to confirm the Licensee’s continuing compliance with its License and these Conditions.

It is hereby agreed as follows:

1. Authorisation

TESTSAFE is authorised to issue IECEx Conformity mark Licenses for the use of the IECEx Conformity Mark on or associated with Ex products which are covered by a current IECEx Certificate of Conformity, in accordance with IECEx 02, and issued by TESTSAFE and meet all the requirements of the IECEx Conformity Mark Regulations (IECEx 04), the Rules and Procedures (OD022) and the IECEx Conformity Mark Terms and Conditions (OD023), subject to the conditions and limitations set out hereafter. In authorising TESTSAFE to issue IECEx Conformity Mark Licenses, this agreement does not give any other contractual rights to TESTSAFE outside that as provided by the IECEx Conformity Mark License Regulations IECEx 04).

The **APPLICANT** is authorised to use the IECEx Conformity Mark on its products which are covered by a current IECEx Certificate of Conformity, in accordance with IECEx 02 and issued by TESTSAFE and meet all the requirements of the IECEx Conformity Mark Regulations IECEx 04), the Rules and Procedures (OD022) and the

IECEX Conformity mark Terms and Conditions (OD023), subject to the conditions and limitations set out hereafter. In authorising the Applicant to use the IECEX Conformity Mark, this agreement does not give any other contractual rights to the Applicant outside that as provided by the IECEX Conformity Mark License Regulations (IECEX 04).

2. Conditions for the use of the IECEX Conformity Mark

- 1) The IECEX Conformity Mark is owned by the International Electrotechnical Commission (IEC) an organisation, whose Head Office is located at 3, rue de Varembe, Geneva, Switzerland.
- 2) The IECEX Conformity Mark, when appearing on or in relation to an Ex product indicates that the Ex Product is covered by an IECEX Certificate of Conformity which in turn is listed under the scope of the IECEX Conformity Mark License.
- 3) The IECEX Conformity Mark can only be used by a holder of an IECEX Conformity Mark License issued by TESTSAFE.
- 4) The IECEX Conformity Mark may be included in published advertisements on condition that the IECEX Conformity Mark refers to Ex products covered by an IECEX Certificate of Conformity, listed on the IECEX Conformity Mark License or associated Mark License Addendum. The mark shall be shown in a manner to give a clear association with the products covered by an IECEX Certificate of Conformity whose reference number is listed on the associated IECEX Conformity Mark License, or associated Mark License Addendum.
- 5) The format of the IECEX Conformity Mark shall be as shown in IECEX 04 and will be verified and approved, in writing, by TESTSAFE, including any proposed changes.
- 6) The Licensee acknowledge that IEC is the owner of the IECEX Conformity Mark, and shall not take any actions that may be taken to indicate that it has any right, title or interest in, or to, the ownership or use of the IECEX Conformity Mark except under the License arrangements.
- 7) The Licensee acknowledges that it may only use this IECEX Conformity Mark under License from TESTSAFE.
- 8) Once approved by TESTSAFE, the Licensee shall not use, alter or modify the IECEX Conformity Mark in any way without the prior formal and documented approval of TESTSAFE.
- 9) The Licensee shall use the IECEX Conformity Mark, or claim by implication that it is licensed to use it, only in respect of those Products listed in IECEX Certificates of Conformity covered under the License.
- 10) The Licensee shall not use the IECEX Conformity Mark, or make any statement with reference to the IECEX Conformity Mark, that in the opinion of TESTSAFE or IEC is misleading or could bring TESTSAFE or IEC into disrepute.
- 11) The Licensee shall on request provide to TESTSAFE any information related to the use of the IECEX Conformity Mark, which TESTSAFE may require, and will render any assistance reasonably required, by TESTSAFE or the IEC, with respect to the protection of the IECEX Conformity Mark or in prosecuting any misuse.

- 12) The Licensee shall, as soon as it becomes aware, inform TESTSAFE of any third party activity which amounts or may amount to an infringement of TESTSAFE's or the IEC's rights in relation to IECEX Conformity Mark.
- 13) The Licensee shall inform its customers and agents that any modification or alteration to the Product may invalidate the IECEX Conformity mark, and shall inform TESTSAFE of any modification or alteration to the Product as soon as such modification or alteration comes to the Licensee's attention.
- 14) The Licensee acknowledges that TESTSAFE shall have the conduct of all proceedings relating to the IECEX Conformity Mark, and the Licensee will at the request of TESTSAFE or IEC give full co-operation in any action, claim or proceedings brought or threatened in respect of the IECEX Conformity Mark.
- 15) The Licensee shall not dispose of, sub-license, assign, transfer or otherwise deal with the License or any part of it, nor confer any privileges, benefits or rights (if any) arising therefrom otherwise than in accordance with the Conditions.
- 16) The Licensee may allow a third party to use the IECEX Conformity Mark in the third party's advertising or promotion if the Licensee:
 - a) has obtained the prior written approval of TESTSAFE
 - b) has paid to TESTSAFE the appropriate fee as decided by it
 - c) maintains full control over the third party and facilitates any surveillance assessments of the third party by TESTSAFE.

TESTSAFE may refuse to allow a Licensee from permitting a third party from using the IECEX Conformity Mark, where TESTSAFE determines that the conditions of the IECEX Conformity Mark License Scheme may be compromised.

- 17) The Licensee at all times remains responsible for the correct use of the IECEX Conformity Mark by any third party.
- 18) A license may be terminated by TESTSAFE or the Licensee at any time in writing, giving reasons for the termination.
- 19) If a License is terminated, use by the former Licensee of:
 - a) The IECEX Conformity Mark;
 - b) The IECEX Conformity Mark License number; on the Product and anything related to the Product shall immediately cease.
- 20) A former Licensee shall advise its staff, customers and any Third Party that it is no longer a Licensee. The IEC, ExMC or TESTSAFE may also publish the termination of a License.
- 21) The Licensee shall appoint a senior member of its Management Team with the responsibility and authority to control use of the IECEX Conformity Mark and shall provide written notification to TESTSAFE issuing the License of any changes to the position.
- 22) The Licensee agrees to notify TESTSAFE as soon as practicable, of any changes to its organization that have the potential to prevent the Licensee from fulfilling the obligations under the License.
- 23) The Licensee agrees to an extension of its existing on-going surveillance audits, as required by IECEX 02 to allow TESTSAFE the opportunity to verify the Licensee's compliance with the IECEX Conformity Mark Regulations, and Operational Document OD023.

- 24) The Licensee agrees to maintain a registry of its Ex products carrying the IECEx Conformity Mark and to make this registry available to TESTSAFE either during surveillance visits or at any time as requested by TESTSAFE.

3. **Validity**

This agreement shall come into force from the date that it is signed by both Parties for an initial period of three years, and shall be tacitly renewed for successive periods of equal duration.

4. **Termination**

4.1 This Agreement can be terminated by either **Party** after consultation and following the receipt of written notification. Each **Party** shall take the required measures to duly finalise its existing commitments.

4.2 The Applicant agrees to comply with the termination requirements detailed in the Rules and Procedures (OD022) and Terms and Conditions (OD023).

In witness whereof each **Party** has caused this Agreement to be executed by its duly authorised representatives on the date first set forth above.

SIGNED

For and on behalf of **TESTSAFE**
(Include Name and Date)

For and on behalf of the **Applicant**
(Include Name and Date)



GGP028

TestSafe Australia

919 Londonderry Road, Londonderry NSW 2753

Quality Assessment Manual ANZEx, IECEx and other Ex Schemes

This Manual is issued subject to the provisions of the Quality Management System of
TestSafe Australia

Revision No: 10
Issue date: 13 March 2008

This document was authorised for release by:

Peter Harley
Director

Signature : 

Date: 13 March 2008

This document was prepared by:

Ujen Singh
Quality & Certification Manager

Signature: 

Date: 13 March 2008

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Revision Record

Revision Number	Detail of Revision	Issue Date
0	Original Issue	April 2002
1	Revision 1 issued to include full revision and conversion to “Quality Assessment Manual”	November 2002
2	Minor changes to address JAS-ANZ audit findings	Dec 2002
3	Removal of Quality Assessment Report	05 May 03
4	LSM replaced by Q&CM, included other Ex schemes, amended terminology eg ExTR, amended auditor training requirements	26 March 2004
5	Added ATEX audits, replaced Appendix F with Appppendix E (in MP 87)	17.08.2004
6	Added wording above (revision 5) to close OFI 953	03.06.2005
7	Added on-going auditor monitoring-section 7.6	15.08.2005
8	Added frequency of surveillance audits-section 3.17	24.11.2005
9	Corrected error in surveillance audit frequency, section 3.17.	12.07.2006
10	Included IECEX Conformity Mark License (changes shown in colour)	13.03.2008

1 Scope and Objective

This manual covers Quality System audits of suppliers of Explosion Protected Electrical Equipment under the ANZEx, IECEX and similar Schemes eg ATEX. [It includes auditing of manufacturers covered by the IECEX Conformity Mark License.](#)

This scope of this manual includes the following types of assessments:

- Initial assessments, prior to issuing certification
- Surveillance assessments, [including IECEX Conformity Mark License](#); and
- Re-assessments

This manual is based on [IECEX OD025 “Guidelines on the Management of Assessment and Surveillance programs for the assessment of Manufacturer’s Quality System, in accordance with the IECEX Scheme.”](#) It includes some requirements of OD022, OD023 and IECEX04 with respect to [IECEX Conformity Mark License](#)

2 Normative references

ISO 9000: 2000	Quality Management Systems - Fundamentals and Vocabulary.
MP 87	Australian/New Zealand Certification Scheme for explosion-protected electrical equipment (ANZEx Scheme)- Basic rules and procedures
IECEX 02: 2006	IEC Scheme for Certification to Standards for Electrical Equipment for Explosive Atmospheres (IECEX Scheme) – Rules of Procedures
IECEX OD022	Rules and Procedures for the granting of Licenses to issue and use the IECEX Conformity Mark
IECEX OD023	Terms and Conditions for use of the IECEX Conformity Mark
IECEX04	IECEX Conformity Mark Licensing System – Regulations

3 Terms and Definitions

NOTE For the purpose of this document, the terms and definitions given in ISO 9000 : 2000, MP 87 and those below shall apply.

3.1 Audit

Systematic, independent and documented process for obtaining **audit evidence** (3.4) and evaluating it objectively to determine the extent to which **audit criteria** (3.3) are fulfilled.

3.2 Product Audit

An audit (3.1) to determine whether the product is in compliance with the type described in the Test Report (3.19).

3.3 Audit Criteria

Set of policies, procedures or requirements used as a reference.

3.4 Audit Evidence

Records, statements of fact or other information, relevant to the **audit criteria** (3.3) and which are verifiable.

NOTE Audit evidence can be qualitative or quantitative.

3.5 Audit Finding(s)

Result(s) of the evaluation of the collected **audit evidence** (3.4) against **audit criteria** (3.3).

NOTE Audit findings can indicate either conformity or nonconformity with audit criteria.

3.6 Audit Conclusion(s)

Outcome of an **audit** (3.1), reached by the audit team after consideration of the audit objectives and all **audit findings** (3.5).

3.7 Audit Client

Organisation or person requesting an **audit** (3.1).

3.8 Auditee

Organisation being audited.

3.9 Auditor

Person with the **competence** (3.15) to conduct an **audit** (3.1).

3.10 Audit Team

One or more auditors conducting an **audit** (3.1).

NOTE 1 One auditor of the audit team is appointed as audit team leader.

NOTE 2 The audit team can include auditors-in-training and, where required, technical experts.

NOTE 3 Observers can accompany the audit team but do not act as part of it.

3.11 Technical Expert

Person who provides specific knowledge or expertise with respect to the subject to be audited.

NOTE 1 Specific knowledge or expertise includes those on the organisation, process, or activity to be audited, as well as language or cultural guidance.

NOTE 2 A technical expert does not act as an auditor in the audit team.

3.12 Audit Programme

Set of one or more **audits** (3.1) planned for a specific time frame and directed toward a specific purpose.

3.13 Audit Plan

Description of the on-site activities and arrangements for an **audit** (3.1).

3.14 Audit Scope

Extent and boundaries of an **audit** (3.1).

NOTE The scope typically includes a description of physical locations, organisational units, activities and processes, as well as the time period covered.

3.15 Competence

Demonstrated capability to apply knowledge and skills.

3.16 Initial Assessment

All activities related to the assessment of a manufacturer, prior to issuing certification. This assessment is separate to the product testing/assessment and is to determine whether the manufacturer meets all the requirements of the relevant clauses of the specified standard (e.g. MP 87 for the ANZEx Scheme, IECEx OD/005, or EN13980) and whether they are effectively implemented, including documentation review, site audit at the manufacturer's premises, preparation and consideration of the audit report and other relevant activities necessary to provide sufficient information to allow a decision to be made whether to grant certification.

3.17 Surveillance

The purpose of surveillance programmes is to:

- Verify that the approved quality system and associated product quality plans, continues to be implemented; and
- To consider the implications of any changes to the system, initiated as a result of changes in the manufacturers operation; and
- To confirm continued compliance with the Certification Scheme requirements, e.g. MP 87.
- [To confirm continued compliance with the IECEx Conformity Mark License requirements](#)

Surveillance of a manufacturer's quality system takes place on a regular basis:

For the ANZEx Scheme, and for manufacturers that have ISO9001 certification, the first surveillance audit is to occur within one year \pm 3 months of the certification being issued, and thereafter after one year \pm 3 months, ie surveillance audits occurring each calendar year approximately 12 months apart.

For manufacturers that do not have ISO9001 certification, the first surveillance audit is to occur within six months \pm 3 months of the certification being issued, and thereafter after every six months \pm 2 months, ie surveillance audits occurring twice per calendar year approximately 6 months apart.

For the IECEX Scheme, and for manufacturers that have ISO9001 certification, the first surveillance audit is to occur within 18 months \pm 3 months of the certification being issued, and thereafter surveillance audits are to be conducted after every 18 months \pm 3 months.

For manufacturers that do not have ISO9001 certification, the first surveillance audit is to occur within 12 months \pm 3 months of the initial certification being issued, and thereafter after every six months \pm 2 months, ie surveillance audits occurring twice per calendar year approximately 6 months apart.

3.18 Re-Assessment

The purpose of surveillance programme is to verify overall continuing effectiveness of the manufacturers quality system in its entirety. The re-assessment should provide for a review of past performance of the system over the period of Certification. The re-assessment program should take into consideration the results of the above review and should at least include a review of the quality system documents and a site audit (which may replace or extend a regular surveillance audit). The re-assessment focuses on the following:

- The effective inter-action between all elements of the system;
- the overall effectiveness of the system in its entirety in the light of changes in operations;
- demonstrated commitment to maintain the effectiveness of the system.

3.19 Test Report

A product test report issued in accordance with MP87 or an IECEx Assessment and Test Report (ExTR) issued in accordance with IECEx 02 and successfully reviewed by TestSafe. This includes test reports issued by TestSafe, one of TestSafe MRA partners or an IECEx Assessment and Test Report.

4 Principles of Auditing

Auditing is characterised by its reliance on a number of principles. These make the audit an efficient and reliable tool in support of management policies and controls, providing information on which management can act to improve its performance. Adherence to these principles is a prerequisite for audit conclusions that are relevant and sufficient, such that auditors working independently from one another will reach similar conclusions in similar circumstances.

Three of these principles relate primarily to personal characteristics of the auditors themselves. These are:

Ethical conduct - *the foundation of professionalism*

The role of the auditor is one of trust, integrity, confidentiality and discretion.

Fair presentation - *the obligation to report truthfully and accurately*

Audit findings, audit conclusions and audit reports reflect truthfully, accurately and completely the audit activities. Any unresolved or diverging opinions between the audit team and the auditee and any obstacles encountered are reported.

Due professional care - *application of reasonable care in auditing*

Auditors exercise a degree of care appropriate to the importance of the task they perform and to the confidence placed in them by audit clients and other interested parties. Having the necessary competence is an important prerequisite.

The remaining two principles of auditing relate primarily to the audit process. An audit is by definition independent and systematic and these characteristics are closely linked to the following two principles of auditing:

Independence - *the basis for the impartiality and objectivity of the audit conclusion*

Audits are objective and independent. Audit team members are free from bias and conflict of interest.

Evidence - *the rational basis for reaching audit conclusions*

Audit evidence is verifiable. It is based on samples of the information available, since an audit is conducted during a finite period of time and with finite resources. However, the use of sampling is appropriate to the confidence placed in the audit conclusions.

5 Managing an Audit Programme

5.1 Introduction

The responsibility and authority for the management of TestSafe's auditing programme resides with the Quality & Certification Manager who shall be responsible for:

- a) establishing the objectives and extent of the audit programme;
- b) establishing the responsibilities, resources and procedures;
- c) ensuring the implementation of the audit programme;
- d) monitoring and reviewing the audit programme;
- e) ensuring that appropriate audit programme records are maintained.

5.2 Audit programme objectives and extent

5.2.1 Objectives of the audit programme

The overall objective of the audit programme is to establish that the manufacturer is complying with the Quality System and overall requirements of the Certification Scheme, e.g. ANZEx and IECEX, or other Schemes.

The specific objective of the audit programme is to:

- a) assess conformity of product produced with the type described in the Test Report, referred to in the certificate, with the requirements of the Standard specified in the certificate;
- b) evaluate the manufacturer's compliance with requirements of the certification scheme;

- c) assess compliance of the quality management system with the requirements of Appendix E of MP87 for the ANZEx Scheme, IECEx Operational Document OD/005 for the IECEx Scheme, EN 13980 for ATEX, or other schemes.
- d) [To confirm continued compliance with the IECEx Conformity Mark License requirements, as relevant to manufacturers holding this Mark License.](#)

5.2.2 Extent of the audit programme

The timing, duration and scope of each audit is determined by the Quality & Certification Manager, in consultation with the relevant Branch Manager and shall be based on size, nature and complexity of the organisation to be audited. This will be influenced by:

- a) the number, importance, complexity, similarity and locations of the activities to be audited;
- b) standards, legal and contractual requirements, policies, procedures and other audit criteria;
- c) accreditation and registration/certification that the organisation may hold;
- d) the results of previous audits or a previous audit programme review;
- e) language, cultural and social issues;
- f) concerns of interested parties;
- g) significant changes to any organisations, activities or functional areas.

5.2.2.1 Scope of initial assessment, surveillance and re-assessment

For initial assessments and re-assessments, all requirements of MP87, Appendix E, shall be assessed for the ANZEx Scheme, IECEx OD/005 for IECEx, and EN 13980 for ATEX. These assessments may be conducted in whole or part at the manufacturer's premises.

Surveillance visits at the manufacturer's premises shall include assessment of:

- the system maintenance elements, which are internal audit, management review and [control of non-conforming product](#);
- customer complaints;
- changes to the documented system;
- areas subject to change;
- selected elements of the certification/registration standard;
- other selected areas as appropriate.
- [compliance with the IECEx Conformity Mark License requirements, as relevant.](#)

NOTE Where a manufacturer has a certified quality system with an appropriate scope, certified by a recognised body (Type A or C manufacturer), then the scope of assessment/surveillance may be restricted to assessing the effectiveness of that quality system with respect to the products covered by the certificate(s).

5.2.2.2 Customer Types

TestSafe has essentially 4 types of customers:

- TYPE (A) A manufacturer requiring an initial assessment or re-assessment prior to the issue of certification, where the manufacturer has a certified quality system e.g. ISO 9001: 2000 with an appropriate scope certified by a recognised body.
- TYPE (B) A manufacturer requiring an initial assessment or re-assessment prior to the issue of certification, where the manufacturer does not have a certified quality system e.g. ISO 9001: 2000, or a certified quality system with an inappropriate scope.
- TYPE (C) A manufacturer, with certification issued by TestSafe, requiring periodic surveillance, where the manufacturer has a certified quality system e.g. ISO 9001: 2000 with an appropriate scope, certified by a recognised body.
- TYPE (D) A manufacturer with certification issued by TestSafe, requiring periodic surveillance, where the manufacturer does not have a certified quality system e.g. ISO 9001: 2000, or has a certified quality system with an inappropriate scope.

The Quality & Certification Manager, in consultation with the relevant Branch Manager, shall determine the amount of resource (in auditor days) that should be spent conducting initial assessments, based upon protection concepts, using the following table as a guideline.

No. of protection concepts proposed or listed on the certificate	AUDITOR TIME ON SITE (AUDITOR DAYS)*	
	MANUFACTURER TYPE (A)	MANUFACTURER TYPE (B)
1	2	2
2-3	2	3
4-5	3	4
6+	4	5

*The above times **do not** include the time spent by technical experts.

All Type A and Type B manufacturers shall be subject to an initial assessment as described in Clause 6 (Audit Activities) of this document.

The number of annual surveillance visits shall be as follows:

- For Type C Manufacturers minimum of 1 per year
- For Type D Manufacturers minimum of 2 per year

For further details of the frequency of surveillance audits, see also section 3.17.

Both Type C and D manufacturers shall be subject to re-assessment no later than 3 years after the date of issue of certification.

The re-assessment visit could also serve the function of a surveillance visit, provided the requirements as defined in 3.17 and 3.18 are fulfilled..

Surveillance visits are to be conducted by TestSafe or by a body operating under an Agreement with TestSafe with the appropriate scope or under the IECEx Scheme. A review of all surveillance visit reports shall be conducted by the Quality & Certification Manager, in consultation with the relevant Branch Manager and in accordance with 6.8.1.

The above table, "Auditor Time on Site", is used as a guide, along with the other criteria, for establishing initial assessment times. For surveillance visits the amount of time spent on site may be reduced by two thirds of the time required for an initial visit (e.g. 4 protection concepts equals 3 initial assessment days for a Type A manufacturer with one day for each subsequent surveillance visit). Similarly for re-assessments, the initial assessment time can be reduced by one third (e.g. 4 protection concepts equals 3 initial assessment days for a Type A manufacturer, with two days for each re-assessment).

5.3 Audit programme responsibilities, resources and procedures

5.3.1 Responsibilities

The Quality & Certification Manager is responsible for the overall management of TestSafe's auditing programme. These responsibilities include:

- a) define, implement, maintain, and improve the audit programme;
- b) identify and arrange resources for the programme.

5.3.2 Resources

When identifying resources for the audit programme, the following should be considered:

- a) financial resources necessary to develop, implement, manage and improve audit activities;
- b) audit tools and methods;
- c) availability of auditors and technical experts;
- d) processes to achieve and maintain auditor competence, and to improve auditor performance;
- e) auditor competence appropriate to the particular audit programme objectives;
- f) time, travel and other auditing needs.

5.4 Audit Records

Records of audits are maintained to demonstrate the operation of the audit programme and include:

- a) results of audit programme review;
- b) audit records, such as:
 - audit plans;
 - audit reports;
 - nonconformity reports; and
 - corrective and preventive action reports;
- c) audit personnel records, covering subjects such as performance evaluation, audit team selection and training.

5.5 Audit programme monitoring and reviewing

The effectiveness of TestSafe's auditing programme is monitored by the Quality & Certification Manager and forms part of the TestSafe internal audit programme, under the JAS-ANZ ISO/IEC Guide 65 accreditation programme.

Such monitoring will consider:

- a) results and trends from monitoring;
- b) conformity with procedures;

- c) evolving needs and expectations of interested parties;
- d) audit records;
- e) alternative or new auditing practices.

Results of the audit programme review can lead to corrective actions and improvement of the audit programme.

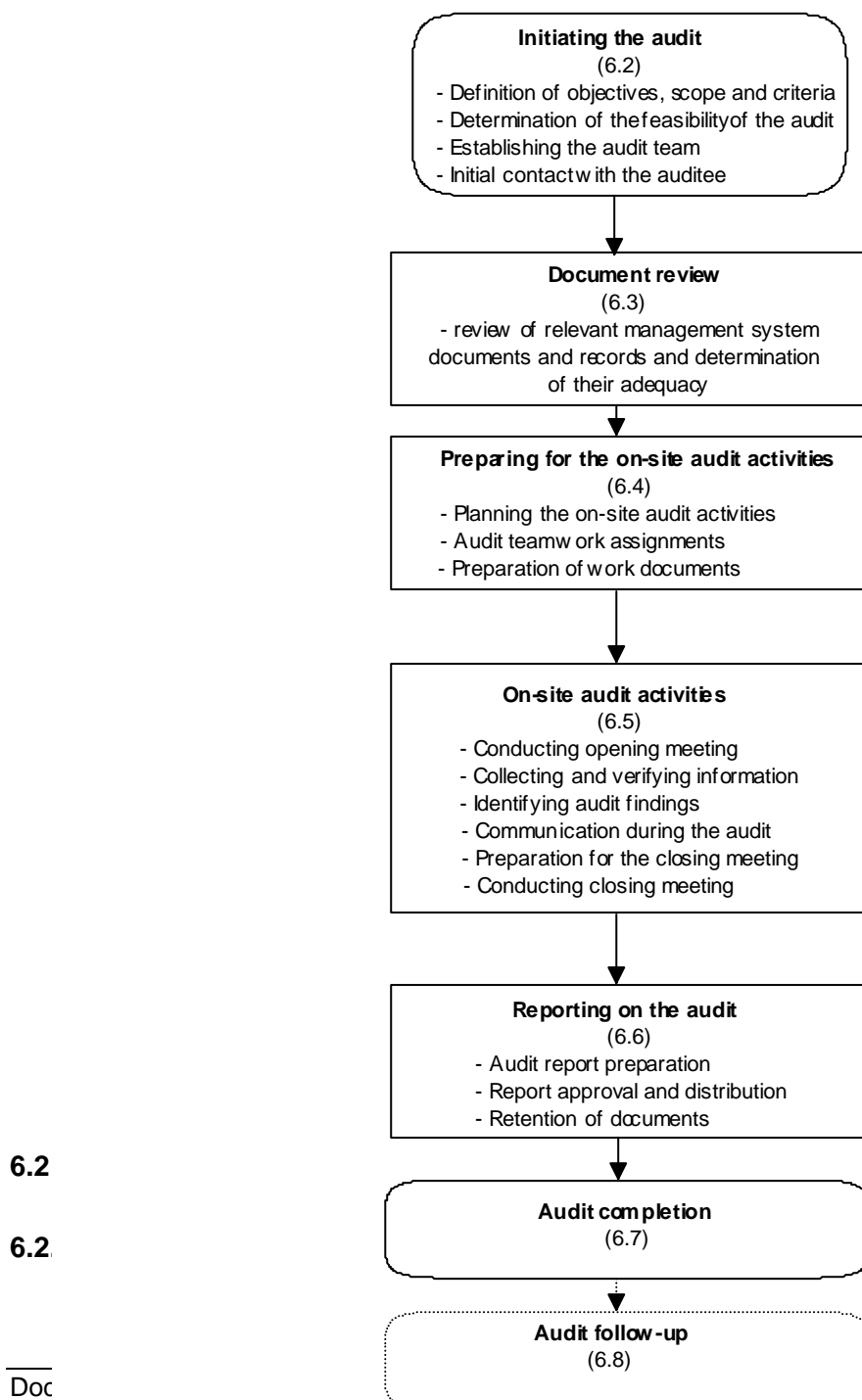
6 Audit Activities

6.1 Introduction

This clause contains guidance on managing and conducting audits as required by the ANZEx Certification Scheme, refer to MP87 and IECEx Scheme, refer to IECEx 02, or other Schemes like ATEX, including the selection of audit team members.

After completion of an audit, audit follow-up actions can take place. (see clause 6.8).

Figure 2 provides a flowchart of the audit process as described in this clause.



6.2

6.2

The objective for the audit programme is to establish that the manufacturer is complying with the Quality System requirements associated with the manufacturer of Ex equipment, specified on the ANZEx or IECEx Certificate of Conformity. The specific Ex quality system requirements are specified in MP87 for the ANZEx Scheme, IECEx OD/005 for the IECEx Scheme, and EN 13980 for ATEX.

An individual audit that is part of a surveillance programme may address only part of an Ex quality system.

In preparing for an audit, the following shall be communicated to the auditee and recorded on the job file:

- The audit scope describes the extent and boundaries of the audit in terms of factors such as physical locations, organisational units, activities and processes to be audited and, where relevant, the time period covered by the audit.
- The audit criteria, i.e. MP87, IECEx OD/005, EN 13980, or other.
- Dates of the audit, as agreed with the auditee
- Membership of the audit Team

6.2.2 Feasibility of the audit

In planning an audit, the Quality & Certification Manager, in consultation with the relevant Branch Manager, determines the feasibility of the audit, taking into consideration such factors as:

- a) sufficient and appropriate information for planning the audit;
- b) adequate co-operation from the auditee;
- c) availability of time and adequate resources.

Upon receipt of an application from a manufacturer for ANZEx or IECEx Certification, the relevant Branch Manager shall:

- ensure the documentation as required by MP87, for ANZEx and IECEx 02, for the IECEx Scheme is provided, including the audit criteria.
- ascertain that sufficient and appropriate information regarding the manufacturer is available e.g. size, location, status of quality system.

As TestSafe is not a Notified Body, its activities under ATEX are restricted to quality auditing to the requirements of EN 13980.

6.2.3 Establishing the Audit Team

When the audit has been declared feasible, an audit team shall be appointed by the Quality & Certification Manager, in consultation with the relevant Branch Manager, including the nomination of an audit Team Leader taking into account the competence needed to achieve the objectives of the audit. When there is only one auditor, the auditor should perform all applicable duties of an audit team leader.

The Quality & Certification Manager, in consultation with the relevant Branch Manager and audit team leader shall identify the resources necessary. This may require consultation with the auditee.

The process of assuring the competence of the audit team should comprise the following steps:

- 1) identifying the knowledge and skills needed to achieve the objectives of the audit;
- 2) defining the criteria by which knowledge and skills are to be evaluated;
- 3) selecting the audit team such that all of the knowledge and skills needed to conduct the audit and to achieve the audit objectives are present in the audit team. If not fully covered by the auditors in the team, the overall competence may be satisfied by including technical experts in the team.

Technical experts should operate under the direction of an auditor.

Table 2 in clause 7 provides examples of methods used by TestSafe, for the evaluation of auditor competence.

Both the audit client and auditee have the right to request the replacement of particular team members on reasonable grounds, which should be communicated to the Quality & Certification Manager. Any decision to replace team members is to be made by the Quality & Certification Manager. Examples of reasonable grounds can be conflict of interest situations (such as an audit team member having been a former employee of the auditee or having provided consultancy services) or previous unethical behaviour.

6.2.4 Initial contact with the Auditee

The initial contact with the auditee can be informal or formal and would normally be by the relevant Branch Manager, considering the following as appropriate:

- a) contacting the manufacturer to establish communication channels;
- b) providing information on proposed timing and audit team composition;
- c) requesting documents, including records, if needed, and
- d) making arrangements for the audit.

Any need for accompanying persons such as observers or guides for the audit team shall be mutually agreed.

6.3 Document Review

Relevant management system documents, including records, from the auditee, including any previous audit reports, may be reviewed to determine the conformity of the system components or processes, as documented, with the requirements of MP87, or other. The review, normally by the audit team leader or by one or more auditors assigned by the audit team leader, would take into account the size, nature and complexity of the organisation, and the objectives and scope of the audit. A preliminary on-site visit is an option to get a good overview of available information.

If the auditee's management system documentation is found to be inadequate, such that it is not commensurate with the audit scope or criteria, the audit client, the Quality & Certification Manager and relevant Branch Manager shall be informed. Further resources are not to be expended on the audit until such concerns are resolved to the satisfaction of the Quality & Certification Manager in consultation with the audit client, the audit team leader and relevant Branch Manager.

6.4 Preparing for the on-site audit activities

6.4.1 Planning the on-site audit activities

NOTE The following guidance may not be fully applicable to unexpected visits.

In general, the audit team leader shall prepare a plan for the on-site audit activities. This plan must provide necessary information to the Quality & Certification Manager, audit team, auditee and audit client. It also facilitates scheduling and co-ordination of the audit activities.

The level of detail provided in the audit plan, should be adapted to suit the scope and complexity of the audit. The details can for example differ between initial and subsequent surveillance visits.

The audit plan includes the audit objectives and scope; which shall include a product audit and should include;

- a) the audit criteria and any reference documents;
- b) the dates and places where the on-site audit activities are to be conducted;
- c) the identification of the organisational and functional units and processes to be audited;
- d) the expected time and duration for audit on-site activities, including meetings with the auditee's management and audit team meetings.

The audit plan can also include, as appropriate:

- e) the identification of the sites, activities, and management system processes that are essential to meeting MP87 requirements for the ANZEx Scheme and IECEx 02 [and IECEx04 \(as relevant\)](#) requirements for the IECEx Scheme in order to allocate appropriate resources to critical areas of the audit;
- f) the identification of the auditee's key representative participating in the audit;
- g) the working and reporting language(s) of the audit where this is different from the native language of the auditor(s) and/or the auditee;
- h) the identification of roles and responsibilities of the audit team members and any accompanying persons;
- i) the audit report topics (including any methods of nonconformity grading), format and structure, expected date of issue and distribution;
- j) logistic arrangements (travel, on-site facilities etc.);
- k) matters related to confidentiality;
- l) any arrangements for audit follow-up actions.

The plan is to be presented to the manufacturer prior to conducting all certification audits but may not be necessary for all surveillance audits.

Any objections by the auditee are to be resolved between the audit team leader and the auditee before continuing the audit.

The audit plan should be sufficiently flexible to permit changes, such as any changes in emphasis, which can become necessary as the on-site audit activities progress. Any revised audit plan should be agreed among the parties concerned before continuing the audit.

6.4.2 Audit teamwork assignments

When an audit is to be conducted by an audit team comprising more than one auditor, the audit team leader, in consultation with the audit team, shall assign to each team member responsibility for auditing specific system processes, functions, sites, areas or activities. Such assignments should take into account the need for auditor independence, competence and efficient use of resources as well as different roles and responsibilities of auditors, auditors-in-training, and technical experts. Changes to the work assignments can be made to ensure the achievement of the audit objectives.

The audit team members should review the relevant information related to their audit assignments and prepare any work documents necessary for those assignments.

6.4.3 Work documents

Work documents used by the audit team for the purpose of reference and/or recording the proceedings of the audit can include:

- a) audit procedures, checklists and audit sampling plans;
- b) forms for recording information, supporting evidence, records of audit findings and meetings.

The use of work documents, such as checklists and forms, should not restrict the extent of audit activities.

Work documents, and any records resulting from their use, should be retained, at least until audit completion. Retention of documents, including records, after audit completion, is described in clause 6.6.3. Those involving confidential or proprietary information should be suitably safeguarded at all times by the audit team members.

6.5 On-site audit activities

6.5.1 Opening Meeting

An opening meeting is to be held, for all certification audits, to confirm the audit plan, clarify how the audit activities will be undertaken, and to establish communications. The opening meeting should be held with the auditee's management or, where appropriate, those responsible for the functions or processes to be audited. The opening meeting should also

include opportunity for the auditee to ask any questions. For surveillance audits, the audit team leader shall determine whether a formal opening meeting is necessary.

The meeting should be formal and records of the attendance shall be kept. The meeting should be chaired by the audit team leader and the following items considered, as appropriate:

- a) introduction of the participants, including an outline of their roles;
- b) confirmation of the audit objectives, scope and criteria;
- c) confirmation of the audit timetable and other relevant arrangements with the auditee, such as the date and time for the closing meeting, any interim meetings between the audit team and the auditee's management, and any late changes;
- d) methods and procedures to be used to conduct the audit, advising the auditee that the audit evidence will only be a sample of the information available and that therefore there is an element of uncertainty inherent in all audits;
- e) confirmation of formal communication links between the audit team and the auditee;
- f) confirmation of the language to be used during the audit;
- g) confirmation that during the audit, the auditee will be kept informed of audit progress;
- h) confirmation that any resources and facilities needed by the audit team are available;
- i) confirmation of matters relating to confidentiality;
- j) confirmation of relevant work safety, emergency and security procedures for the audit team;
- k) confirmation of availability, roles and identities of any guides;
- l) method of reporting including any grading of non-conformities;
- m) information about conditions on which the audit can be terminated;
- n) information about any appeal system on the conduct or outcome of the audit.

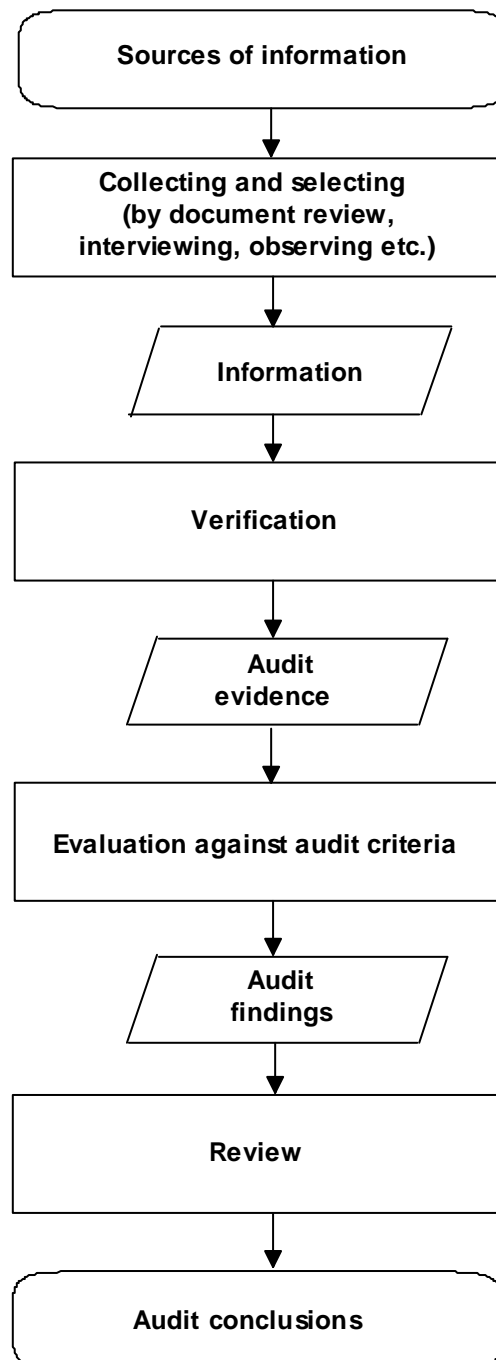
6.5.2 Roles and responsibilities of Guides

Where guides are assigned, they should assist the audit team and act on the request of the audit team leader. Their duties can include ensuring that rules concerning site safety and security procedures are known and respected by the auditors, and they can also witness the audit on behalf of the auditee. Guides should not influence or interfere with the conduct of

the audit except where, with the agreement of the auditor, the guide can provide clarification or assist in establishing correct information.

6.5.3 Collecting and verifying Information

Figure 3 (below) provides an overview of the process steps from collecting information to reaching audit conclusions.



Information relevant to the audit objectives, scope, and criteria, including information relating to interfaces between functions, activities, and processes should be collected during the audit. It should be verified by the auditor(s) and can then be considered to be audit evidence. Audit evidence should be identified as such and recorded as audit notes or observations.

NOTE The audit evidence will inevitably be only samples of the information available, since an audit is conducted during a finite period of time and with limited resources. There is thus an element of uncertainty inherent in all audits, and those acting upon the audit conclusions should be aware of this uncertainty.

The sources of information chosen can vary according to the scope and complexity of the audit and can include:

- a) interviews;
- b) observations of activities and the surrounding work environment and conditions;
- c) documents, including, for example, policy, objectives, plans, procedures, instructions, product test reports and certificates, specifications, drawings, contracts orders;
- d) records, such as inspection records, minutes of meetings, reports or logbooks on customer complaints and other relevant communication from external parties, audit reports, monitoring programmes and results of measurements;
- e) data summaries, analyses, metrics and performance indicators;
- f) records of the basis of relevant auditee's sampling programmes and the procedures for ensuring effective quality control of sampling and measurement processes;
- g) reports from other sources, for example, customer feedback, external reports and vendor supplier ratings;
- h) computerised databases and web sites.

6.5.4 Audit findings

Practical Help - Interviews

Interviews are one of the important means of collecting information and should be carried out in a manner adapted to the situation and person interviewed. However, the auditor should consider the following:

- a) interviews should be held with persons from different levels and functions, and especially with persons performing activities or tasks within the scope of the audit;
- b) whenever possible, the interview should be conducted during normal working hours and at the normal workplace of the interviewed person;
- c) every attempt should be made to put the interviewed person at ease prior to the interview;
- d) the reason for the interview and any note taking should be explained;
- e) interviews can be initiated by asking the persons to describe their work;
- f) the results from the interview should be summarised and reviewed with the interviewed person;
- g) questions that bias the answers (leading questions) should be avoided;
- h) the interviewed persons should be thanked for their participation and co-operation.

Collected audit evidence is to be evaluated against the audit criteria to generate the audit findings. An audit finding can indicate either conformity or nonconformity with audit criteria. If so decided, by the audit team leader, audit findings can be graded in accordance with the audit plan.

The grading of any notes or observations may be of value to the manufacturer, e.g. positive or negative observations.

An audit team should meet as needed to review the audit findings at appropriate stages during the audit.

Non-conformities, where observed, should be summarised to at least indicate locations, functions, processes, or requirements that were audited.

Individual audit findings of conformity should also be recorded and supported with audit evidence.

Nonconformities are to be recorded and supported by audit evidence. Nonconformities are to be graded as follows:

- a) Minor Non-conformance – where a requirement of the ANZEx certification scheme (or other) was not met either in part or full but where compliance of the product, with the product standard shown on the ANZEx or IECEx certificate (or other), can still be demonstrated.

- b) Major Non-conformance – where a requirement of the ANZEx certification scheme has been found not to have been met either in part or full and where compliance of the product with the product standard shown on the ANZEx or IECEx certificate (or other) cannot be demonstrated or is in doubt.

Individual non-conformances may be raised for each item raised, depending on the audit team leader.

Nonconformities are to be reviewed with an appropriate auditee representative to obtain acknowledgement of the audit evidence. The acknowledgement indicates that the audit evidence is accurate, and that the nonconformity is understood. Every attempt should be made to resolve any divergence of opinion concerning the audit evidence and/or findings, and unresolved points should be recorded.

The audit team leader may determine whether it is possible for the auditee to correct any nonconformities raised, prior to the completion of the audit.

6.5.5 Communication during the audit

Dependent upon the scope and complexity of the audit, it can be necessary to make formal arrangements for communication during the audit.

An audit team should confer at least daily in order to exchange information, assess audit progress, and reassign work between auditors as needed.

During the audit, the audit team leader should periodically communicate the status of the audit and any concerns to the auditee and manufacturer, as appropriate. Any evidence collected in the audit that suggests a significant risk exposure should be reported immediately to the auditee and, as appropriate, to the audit client.

Where the available audit evidence indicates that the audit objectives are unattainable, the audit team leader is to report the reasons to the most accessible senior manager of the audit client to determine the appropriate action. Such action can include reconfirmation of the audit plan, termination of the audit or a change in the audit objectives.

Any concern about an issue outside the audit scope should be noted and reported to the audit team leader, for possible communication to the audit client. Any need for changes in the audit scope, which may become apparent as on-site auditing activities progress are to be reviewed with and approved by the manufacturer and Quality & Certification Manager.

6.5.6 Preparation for the Closing Meeting

The audit team are to confer prior to the closing meeting in order to:

- a) review the audit findings and any other appropriate information collected during the audit;

- b) prepare a list of audit findings, if appropriate;
- c) reach consensus on the audit conclusions;
- d) agree on roles and tasks for the closing meeting;
- e) prepare recommendations, if specified by the audit objectives;
- f) discuss subsequent audit follow-up, if appropriate.

In many instances a simplified approach can be taken for the audit team review, depending on the audit objectives and scope and the audit team size.

6.5.7 Closing Meeting

A closing meeting should normally be held to present audit findings and conclusions in such a manner as to ensure that they are understood and acknowledged by the manufacturer, and to agree, if appropriate, on the time period for the auditee to present any corrective action plan.

The meeting should be formal and records of attendance are to be kept. The meeting chaired by the audit team leader should be held with the auditee's management and those responsible for the functions audited.

Any unresolved diverging opinions relating to audit findings and/or conclusions between the audit team and the auditee should be discussed and if possible resolved. If not resolved, both opinions should be recorded and the Quality & Certification Manager informed.

6.6 Reporting on the Audit

6.6.1 Audit report preparation and content

The audit team leader is responsible for the preparation and contents of the audit report.

The audit report shall provide a complete, accurate, concise and clear record of the audit and should contain audit conclusions on issues such as the following, if within the audit objectives and scope:

- extent of conformance of the quality system to the requirements of MP87, EN 13980, IECEx OD005, [OD022](#) and [OD023](#).
- the effective implementation and maintenance of the quality system, relevant to the requirements of MP87, or other.
- the ability of management review process to ensure the continuing suitability, adequacy, and effectiveness of the quality system, relevant to the requirements of MP87, or other.

The audit report should also include, or make reference to the following:

- a) the identification of the organisational and function units or processes audited;
- b) the identification of the manufacturer;
- c) the identification of audit team members;
- d) the date(s) and place(s) the on-site audit activities were conducted;
- e) the audit criteria, i.e. reference to MP87, IECEx OD005, [OD022](#) and [OD023](#), EN 13980, or other.
- f) the audit findings.

The audit report can also include or reference, as appropriate:

- g) the agreed audit objectives, scope and plan;
- h) the time period covered by the audit;
- i) the identification of the manufacturer's key representatives participating in the audit;
- j) a summary of the audit process including any obstacles encountered;
- k) a statement of the confidential nature of the contents;
- l) a distribution list for the audit report;
- m) confirmation that the audit objectives have been accomplished within the audit scope in accordance with the audit plan;
- n) any agreed follow-up action plans;
- o) any unresolved diverging opinions between the audit team and the auditee;
- p) areas not covered, although within the scope.

6.6.2 Report Approval and Distribution

Every attempt shall be made for the audit report to be submitted to the audit client within 1 month from the date of the audit. The Quality & Certification Manager shall be responsible for monitoring this. If this is not possible, the audit team leader shall inform the Quality & Certification Manager and the audit client of the reasons for the delay and a revised issue date then agreed.

The audit report shall be dated, and reviewed by the relevant Branch Manager and approved by the Quality & Certification Manager.

The audit report should then be distributed as follows:

- Original to the audit client
- 1 Copy to be retained on the audit file related to the job file

The confidentiality of the audit report should be respected and appropriately safeguarded by the audit team members and all report recipients.

6.6.3 Retention of Documents

TestSafe shall retain copies of audit reports for a period not less than 10 years.

Unless required to do so by law, the audit team and TestSafe staff with any involvement in the audit, shall not disclose the contents of documents, any other information obtained during the audit, or the audit report, to any other party without the explicit approval of the audit client and, where appropriate, the approval of the auditee. If disclosure of the contents of any audit document is required, the audit client and auditee should be informed as soon as possible.

6.7 Audit Completion

The audit is completed when all activities in the audit plan have been finalised and the approved audit report has been distributed to the audit client with copies distributed as per 6.2.2

6.8 Audit Follow-Up

6.8.1 Review

In reviewing audit reports the Quality & Certification Manager shall review audit reports, any non-conformities raised and manufacturer responses, and use the following rating system:

RATING	DEFINITION	ACTION FOLLOWING AN INITIAL ASSESSMENT OR RE-ASSESSMENT	ACTION FOLLOWING A SURVEILLANCE VISIT
A	Where a quality system fully meets the requirements or where there are only very few minor nonconformities. Also where compliance of the product is observed during a product audit.	Issue or maintain certification	Certification to be maintained
B	Where the quality system has a series of minor nonconformities Also where compliance of the product is observed during a product audit.	Issue or re-issue the Certification upon receipt of satisfactory documentary evidence supporting effective corrective action which is then subject to verification at the next surveillance visit	Certification is to be maintained upon receipt of an acceptable corrective action plan, which is subject to verification at the next visit.
C	Where the quality system has major nonconformities and, or there is a non-compliant product observed during the product audit.	Issue or re-issue the Certification after a satisfactory follow-up visit has verified that the corrective actions have been effectively documented and implemented.	Certification is to be maintained only after a satisfactory follow-up visit has verified that the corrective actions have been effectively documented and implemented. Should the manufacturer fail to take timely and effective corrective action, then TestSafe reserves the right to suspend or withdraw certification. (*)
D	Where the quality system has many major nonconformities which may include non compliant product observed during the product audit	Issue or re-issue the Certification only after a further complete assessment of the quality system has been satisfactorily completed.	Suspend (*) the certification pending a further complete assessment to re-establish the effectiveness of the quality system. This is to be followed by surveillance visits at a frequency, which maintains confidence in the effectiveness of the quality system.
E	Where there is no quality system or a system that has serious deficiencies rendering it ineffective	Close the application, no Certification to be issued or re-issued	Withdraw (*) the certification and inform the P/8 Committee if an ANZEx Certificate. Inform all other CBs if an IECEx Certificate

* Where the nonconformities only affect a particular Ex product(s), which are listed on the certificate, then as an alternative to suspension or withdrawal of the certificate, the particular Ex product in question may be removed from the certificate. In this case the ANZEx Scheme Administrator shall be informed so as to amend the certificate database.

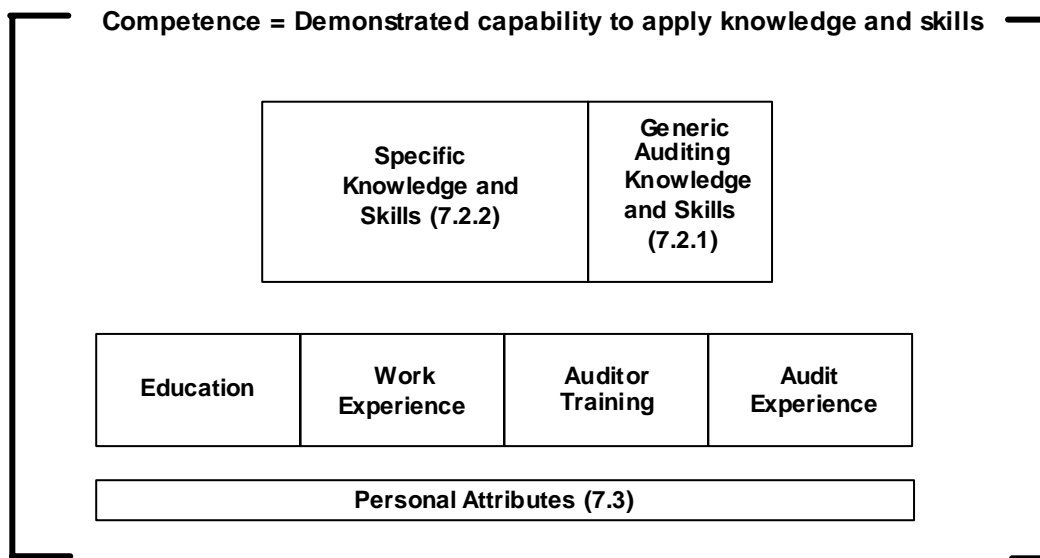
7 Competence of Ex Product Certification Auditors

7.1 Introduction

In order to ensure that reliance can be placed on the audit process, it is essential that auditors be competent. To become an Ex product certification auditor, a person needs to demonstrate the competence to conduct audits, i.e. the capability to apply knowledge and skills, relevant to product certification, that are necessary to conduct audits.

Personal attributes, education, audit training, work and audit experience are the building blocks for the knowledge and skills needed to be a competent product certification auditor.

These relationships are shown in figure 4.



In addition to describing the building blocks this clause outlines the knowledge and skills needed to become:

- a) a product certification auditor
- b) an audit team leader.

This clause also describes a process for evaluating product certification auditors and audit team leaders, which occurs at various stages (see figure 5).

The evaluation process described should first be used to conduct the initial evaluation of a person who wishes to become a product certification auditor.

Providing competent auditors is only the first step towards ensuring the reliability of the audit process. The second step is selecting the appropriate auditor(s) for the audit team to ensure audit team competence for a specific audit. The evaluation criteria described in table 3

should be used for selecting auditors to a specific audit team. The audit team selection process is described in more detail in sub-clause 6.2.3.

Finally, auditors should maintain and improve their competence through professional development and participation in audits. On-going evaluation of auditor performance should be used to identify opportunities for maintenance and improvement of competence.

Figure 5 illustrates the relationship between the initial evaluation of an auditor, audit team selection, continuing professional development, maintenance of auditing ability and the continual process of auditor evaluation.

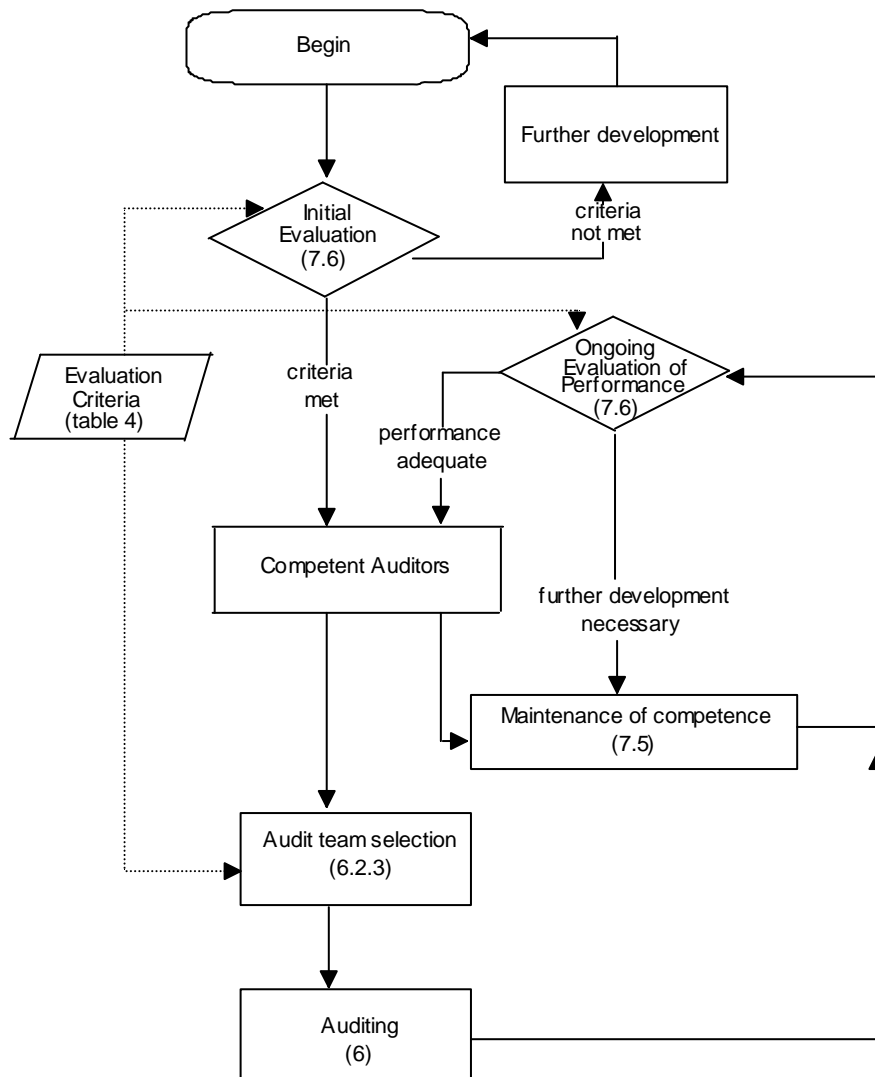


Figure 5 - Initial and on-going evaluation of auditors and audit team selection

7.2 Knowledge and Skills

Sub-clauses 7.2.1 and 7.2.2 covers the knowledge and skills that apply to product certification auditors.

7.2.1 Generic Auditing knowledge and skills of product certification auditors

Auditors should have knowledge and skills in the following areas:

- a) audit procedures, tools and methods - to enable the auditor to select and apply those appropriate to different audits and ensure that audits are conducted in a consistent and systematic manner. An auditor should be able to:
- apply audit procedures, tools and methods;
 - plan and organise the work effectively;
 - conduct the audit in a timely manner;
 - prioritise and focus on matters of significance;
 - collect information through effective interviewing, listening, observation, reviewing documents, including records;
 - verify the accuracy of collected information;
 - confirm the sufficiency and appropriateness of audit evidence to support audit findings and conclusions;
 - assess audit risk;
 - understand the appropriateness and consequences of using sampling techniques;
 - record audit activities through work documents;
 - prepare audit reports that are clear and concise;
 - hold information confidential;
 - communicate effectively, either through personal linguistic skills or through the support of a competent interpreter.
- b) management system and reference documents - to enable the auditor to comprehend the scope of the audit and apply audit criteria. Knowledge and skills in this area should cover:
- application of management systems to different organisations;
 - interaction between the components of the management system;
 - quality management system standards, applicable procedures or other management system documents used as audit criteria;
 - differences between and priority among the reference documents;
 - application of the reference documents to different audits;

- information systems and technology for the management, authorisation, distribution and control of documents, data and records.
- c) organisational situations - to enable the auditor to comprehend the auditee's operational context. Knowledge and skills in this area should cover:
- organisational size, structure, functions, and interrelationships;
 - general business processes and related terminology;
 - cultural and social customs of the auditee;
 - language of the auditee.
- d) applicable laws, regulations and other requirements relevant to the discipline to enable the auditor to work within, and be aware of the requirements that apply to the organisation being audited. Knowledge and skills in this area should apply to:
- contracts and agreements;
 - labour, workplace safety, and working conditions;
 - activities products and services;
 - international treaties and conventions;
 - production environment.

7.2.2 Specific knowledge and skills of product certification auditors

Product certification auditors should have knowledge and skills in the following:

- a) product quality planning related methods and techniques - to enable the auditor to examine those aspects of a quality management system, relevant to the production of Ex products and to generate appropriate audit findings and conclusions. Knowledge and skills in this area should include:
- quality terminology;
 - quality management principles and their application;
 - product quality plans and their application as part of an overall quality management system
 - quality tools and their application (for example statistical process control, failure mode and effect analysis, etc).

b) products, including services, and operational processes, to enable the auditor to comprehend the technological context in which the audit is being conducted. Knowledge and skills in this area should include:

- Ex terminology;
- critical characteristics of processes and products, including services;
- Ex product assessment and testing processes and practices, including the [IECEX Conformity Mark License programme](#).
- Ex product Standards, Australian, Joint Australian/New Zealand and IEC

Auditors should also have:

- not less than 3 years recent experience working directly with or associated with certified products;
- an understanding of the ANZEx and IECEx Schemes, associated terminology and relevant Standards;

7.3 Personal Attributes

Personal attributes contribute to the successful performance of an auditor. An auditor should be:

- a) open minded - willing to consider alternative ideas or points of view;
- b) diplomatic - tactful in dealing with people;
- c) observant - constantly and actively aware of physical surroundings and activities;
- d) perceptive - instinctively aware and able to understand and adapt to situations;
- e) tenacious - persistent, focused on achieving objectives;
- f) decisive - reaching timely conclusions based on logical reasoning and analysis;
- g) self-reliant - acts and functions independently while interacting effectively with others;
- h) ethical - fair, truthful, sincere, honest and discreet.

7.4 Education, work experience, audit training and audit experience

7.4.1 Introduction

This sub-clause describes the building blocks needed to acquire the knowledge and skills described in sub-clause 7.2. Table 1 provides the recommended levels of education, work experience, auditor training and audit experience. Table 1 can be used to establish the evaluation criteria in Table 3. The appropriate levels can vary and will depend on:

- the overall competence of the individual
- the objectives and scope of the audit programme

- size, nature and complexity of the organisation to be audited
- certification/registration requirements; and
- complexity of the management system

7.4.2 Product Certification Auditor

To acquire the knowledge and skills necessary to become a product certification auditor a person should have:

- a) Education - completed an education sufficient to permit the acquisition of knowledge and skills defined in clause 7.2.
- b) Work experience - work experience in a technical, managerial or professional position involving the exercise of judgement, problem solving and communication with other managerial or professional personnel, peers, customers and/or other interested parties.

Part of the work experience should be in a position where the activities undertaken contribute to the development of knowledge and skills in the quality management field.

- c) Auditor training - undergone training that contributes to the development of the knowledge and skills described in sub-clause 7.2.1. Training may be provided by the person's own organisation or by an external organisation.
- d) Audit experience - gained experience in the audit activities described in clause 6. The overall audit experience should cover the complete audit process and the entire quality related standard, e.g. ISO 9000. This experience should have been gained under the supervision and guidance of an audit team leader in the same discipline. This on-the-job training should be current.

NOTE In exceptional cases, e.g. where the audit programme or quality system Standard has been recently introduced, alternative methods may be considered to provide guidance and supervision to the auditor-in-training. However, in such cases care should be taken to ensure that the overall reliability of the audit process is not impaired.

7.4.3 Audit Team Leader

Prior to assuming responsibility for leading an audit team an auditor should:

- a) demonstrate the knowledge, skills and personal attributes necessary for effective leadership and efficient management of the audit. This includes auditor training, planning, organising, directing, performing and reporting audits;

- b) have performed the additional audits recommended in Table 1 acting as an audit team leader under the supervision and guidance of another auditor who is competent as an audit team leader (Supervising Auditor);
- c) be able to reach audit conclusions on the overall capability of the quality management system.

Table 1 - Recommended education, training, work and audit experience

	Auditor (see note 3)	Additional audit experience for an audit team leader
Education	Secondary education (see note 1)	No additional recommendations
Total work experience	5 years (see note 2)	No additional recommendations
Work experience in a certified Quality System environment	at least 2 years of the total 5 years	No additional recommendations
Auditor training	40 hours of auditor training	No additional recommendations
Audit experience	4 complete audits in any field (as an auditor in training, as applicable). The audits should be completed within the last three consecutive years	2 complete audits acting in the role of an audit team leader. The audits should be completed within the last three consecutive years.

NOTE 1 Secondary education is that part of a national educational system that comes after the primary or elementary stage, but that is completed prior to entrance to a university or similar educational institution; plus a recognised qualification in a relevant technical subject.

NOTE 2 The number of years of work experience may be reduced by one year if the person has completed appropriate post-secondary education.

NOTE 3 Where an audit is conducted by a sole auditor, then that auditor should have all the competencies of an audit team leader.

7.5 Maintenance and improvement of knowledge and skills

7.5.1 Continuing professional development

Continuing professional development is concerned with maintenance and improvement of knowledge and skills. Auditors are required to maintain records of their continuing professional development. These may be reviewed by the Quality & Certification Manager.

The continuing professional development activities should take into account changes in the needs of the individual and the organisation, the practice of auditing, standards and other requirements.

This can be achieved through a number of means such as additional work experience, training, private study, coaching, attendance at meetings, seminars and conferences or other relevant activities.

7.5.2 Maintenance of auditing capability

Auditors should maintain and demonstrate their auditing capability through regular participation in quality related audits, e.g. ISO/IEC Guide 62/65, ISO/IEC 17025 and ISO 9000/14000 are examples.

7.6 Auditor evaluation process

The Quality & Certification Manager shall approve the acceptance of TestSafe staff, Contractors and Agents as TestSafe product certification auditors and audit team leaders. A record of TestSafe accepted auditors and their scope shall be maintained by the Quality & Certification Manager.

The Quality & Certification Manager shall also be responsible for the continual evaluation of TestSafe product auditors and audit team leaders to ensure auditing capability and identify training and other skill enhancement needs.

- (a) On-going team leader monitoring should include, but not be restricted to:
- assessment of QARs issued by the team leaders – this would be conducted by the Q & C Manager, or other team leaders, and the notes on this assessment shall be filed in the relevant audit file (of the client). Copies of these QAR assessments shall also be maintained in the Auditors' Training records, when appropriate. Areas for improvement and areas of strength shall be brought to the attention of the team leader that penned the QAR. Training or other methods of skill enhancement shall be undertaken, as required.
 - on-site monitoring of team leader performance during an audit. This may be conducted either by the Q & C Manager, or other TestSafe team leaders. This evaluation of team leader competence shall be documented using GPF027, with results being maintained in the Auditor Training records file. Arising out of these findings, training or other methods of skill enhancement shall be undertaken, as required. Initially, such documented evaluations should be conducted within ten audits for each team leader, with the frequency being reduced to twenty audits with increasing team leader experience and competence.

- (b) On-going auditor evaluations would include, but not be restricted to:

- on-site monitoring of auditors' performance during an audit. This may be conducted either by the Q & C Manager, or other TestSafe team leaders. This evaluation of auditor competence shall be documented using GPF027, with results being maintained in the Auditor Training records file. Training or other methods of skill enhancement shall be undertaken, as required. Such documented evaluations should be conducted within five audits for each auditor, with the frequency being reduced to ten audits with increasing auditor experience and competence.

In conducting evaluations of individuals seeking acceptance as a TestSafe Ex product certification auditor or audit team leader, the Quality & Certification Manager shall use one or combination of the evaluation methods detailed in Table 2 and 3 below.

Table 2 - Evaluation Methods

Evaluation Method	Objectives	Examples
Records review	Records are reviewed to verify the background of the auditor	Analysis of records of education, training, employment and audit experience
Interview	Interviews are used to evaluate personal attributes, communication skills, verify information, test knowledge, acquire additional information	Face to face and telephone interviews
Observation	Observation is used to evaluate personal attribute and the application of skills and knowledge	Role playing, witnessed audits, on the job performance
Post audit review	Post audit review is used where direct observation may not be possible or appropriate	Review of audit reports, debriefing with colleagues and clients, debriefing with the auditor
Testing	Testing is used to evaluate personal attributes and knowledge and skills and their application	Oral and written exams, psychometric testing
Feedback	Feedback (positive and negative) is used to provide information about how the performance of the auditor is perceived.	Surveys, questionnaires, personal references, testimonials, complaints

Table 3 - Examples of methods for evaluating auditor competence

Evaluation Criteria	Evaluation Method	Knowledge and Skills						
		7.2.1			7.2.2			
		Audit procedures, tools and techniques	Management systems and reference documents	Organisational situations	Relevant laws, regulations and other requirements	Quality related methods and techniques	Products, services, and operational processes	Technical aspects of operations
Relevant education	Review records of education Obtain feedback from instructors or educational institutions							
Relevant work experience	Review records of Employment Obtain feedback from employers and supervisors							
Completion of relevant training course(s)	Review training records: course content and result Obtain feedback from the training course provider							
Personal attributes	Psychometric testing Interview the auditor Obtain feedback from the audit team leader and other members of the audit team Obtain feedback from audit clients Witness the person perform an audit(s) Role playing							
Completion of an auditor training course	Review training records: course content and result Obtain feedback from the training course provider							
Examination(s) results	Review test results							
Audit experience: number of audits and audit days, complexity and type of audits completed	Review records of participation such as audit logbooks, audit reports							
Auditor performance	Observe the person conduct audit(s) Conduct post audit review(s) Obtain feedback from the audit team leader and other members of the audit team Obtain feedback from audit clients							

NOTE In this table the dark shaded areas indicate the evaluation method and evaluation criteria that should apply to evaluate the knowledge and skills.