

IALA Guideline No. 1034

On the Certification of Marine Aids to Navigation Products

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Document Revisions

Revisions to the IALA Document are to be noted in the table prior to the issue of a revised document.

Date	Page / Section Revised	Requirement for Revision
December 2005	Document amended to include reference to Certification Templates	Certification Templates developed to assist in the process.
December 2008	Document	General updating

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Note –product certification templates are available – please contact IALA (e-mail: iala-aism@wanadoo.fr attention Technical Co-ordination Manager) for more information.

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Policy and Principles

The International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) has introduced a procedure for the use of an IALA Conformity Mark on products manufactured by companies that conform to the relevant Manufacturers Product Data Sheet (MPDS) and appropriate IALA documentation. Once the manufacturer has completed a Product Certification Template it is recognized as the Manufacturers Product Data Sheet (MPDS) referred to in this Guideline.

The procedure is based primarily on the principle that participating manufacturers have a Quality Management System (QMS) that is accredited to the standards of the relevant sections of the ISO 9000 Series and is described in Section 1 of this Guideline. Where the Quality Assurance methods of a manufacturer are not accredited to the ISO 9000 series, alternative product certification procedures are described in Section 2 of this Guideline.

Participation by manufacturers in the product certification procedure is voluntary and those manufacturers that participate in the procedure need not necessarily apply it to all of their products.

The product certification procedure is intended to assist National Members that have not established their own inspection and approval system, when assessing or purchasing Aids to Navigation products.

1 PROCEDURE FOR THE USE WITH QUALITY ASSURANCE METHODS ACCREDITED TO RELEVANT ISO STANDARDS

1.1 GENERAL

The procedure for the certification of products described in this section applies to those manufacturers that have a Quality Management System (QMS) accredited to the standards of the relevant sections of the ISO 9000 Series.

The conformity assessment is based upon the MPDS and applicable IALA Recommendations and IALA Guidelines. Products for which a valid Declaration of Conformity (Figure 1) has been made by the manufacturer, and recognised by IALA, may be marked with the IALA Conformity Mark. A Flow Chart of the Procedure is provided at Figure 2.

1.2 Responsibilities

1.2.1 IALA

- 1 To ensure that the procedure operates for the benefit of National and Industrial Members of the Association.
- 2 To prepare and approve appropriate IALA Recommendations and Guidelines including the Product Certification Templates.
- 3 On receipt of an application from a manufacturer for a product to be Certified in accordance with these Guidelines, to:
 - a verify that the manufacturer has up to date ISO 9000 series accreditation and notify the manufacturer accordingly;
 - b notify the manufacturer of the IALA Recommendations , Guidelines and Product Certification Templates that relate to the performance and standard of the product;
 - c on receipt assess the manufacturer's "Declaration of Conformity" to ensure that all the IALA requirements are included in the Declaration;
 - d on completion of the process, notify the manufacturer that the IALA Conformity Mark may be used on the product and of the Unique Number that is to be included in the Mark.
- 4 To maintain lists of all products for which Certificates of Conformity and Declarations of Conformity have been issued.

1.2.2 Accreditation Authority used by the Manufacturer

- 1 To ensure that the product for which certification is requested and the relevant requirements of IALA for the product are incorporated in the Accreditation Procedure of the manufacturer.
- 2 To issue a Certificate of Conformity on completion of the Product Certification Procedure under the process currently in use at the manufacturer.
- 3 To undertake periodic audits of the manufacturer's Quality Management System.

1.2.3 Manufacturers

- 1 To apply to IALA for assessment of the product. The application should include the details that are, or will be, given in the Manufacturer's Product Data Sheet, information on the Quality Management System in use at the site where the product is being, or will be, manufactured, and the IALA Recommendations and Guidelines that have been taken into account during the design of the product.

- 2 To ensure that the QMS documentation includes the product and all relevant IALA requirements.
- 3 On completion of any necessary testing and audit by the QMS or the Accreditation Authority, to forward to IALA a “Declaration of Conformity” for the product. An example of the format of a “Declaration of Conformity” is given in Figure 1.
- 4 To ensure that the IALA Conformity Mark complies with the guidance given in section 1.5 and is used only in respect of the product described in the relevant Declaration of Conformity.
- 5 To ensure that the products continue to be designed and manufactured to the standard that was assessed in accordance with this procedure.
- 6 To reapply for certification if any change is made that may alter the performance of a previously certified product.

1.3 Product Certification Templates

Product templates identify parameters that shall be tested and the standards against which each parameter shall be tested to enable a comprehensive evaluation of products.

The Templates include the following sections:

- 1 Ref. No. – for each parameter that should be stated by the manufacturer.
- 2 Parameter category – parameters are typically grouped in the following Categories: Operational, Safety, Electrical, Physical, Environmental, Service, Disposal.
- 3 Parameter – describes items that should be stated by the manufacturer
- 4 Measured Value – the value of the parameter as measured using the specified test method as provided by the manufacturer.
- 5 Test Method – method recommended by IALA to measure the parameters. Where none is mentioned, the manufacturer shall state the test method used, preferably with reference to international or national standards, and provide a copy of such standard to IALA upon request. If a manufacturer wishes to use an alternative standard, it is the responsibility of the manufacturer to confirm that the standard used conforms to the IALA quoted standard, and to provide a copy of such standard to IALA upon request.
- 6 Comments – may contain additional information as required.

1.4 Format of a “Declaration of Conformity”

The format of a Declaration of Conformity shall be based on the following example.

Declaration of Conformity

Trade Name of Manufacturer:

Description and identity of product:

Address of Manufacturer:

Telephone No:

Telefax No:

E-Mail address:

Website:

This product complies with the details given in Manufacturers Product Data Sheet No. and with the following IALA documents:

IALA Product Certification Template Name....., dated.....;

IALA Recommendation No, on....., dated

IALA Guidelines No, on, dated..... .

Signed Date

(A Senior Manager of the manufacturer's QMS)

Figure 1 Example of a Declaration of Conformity

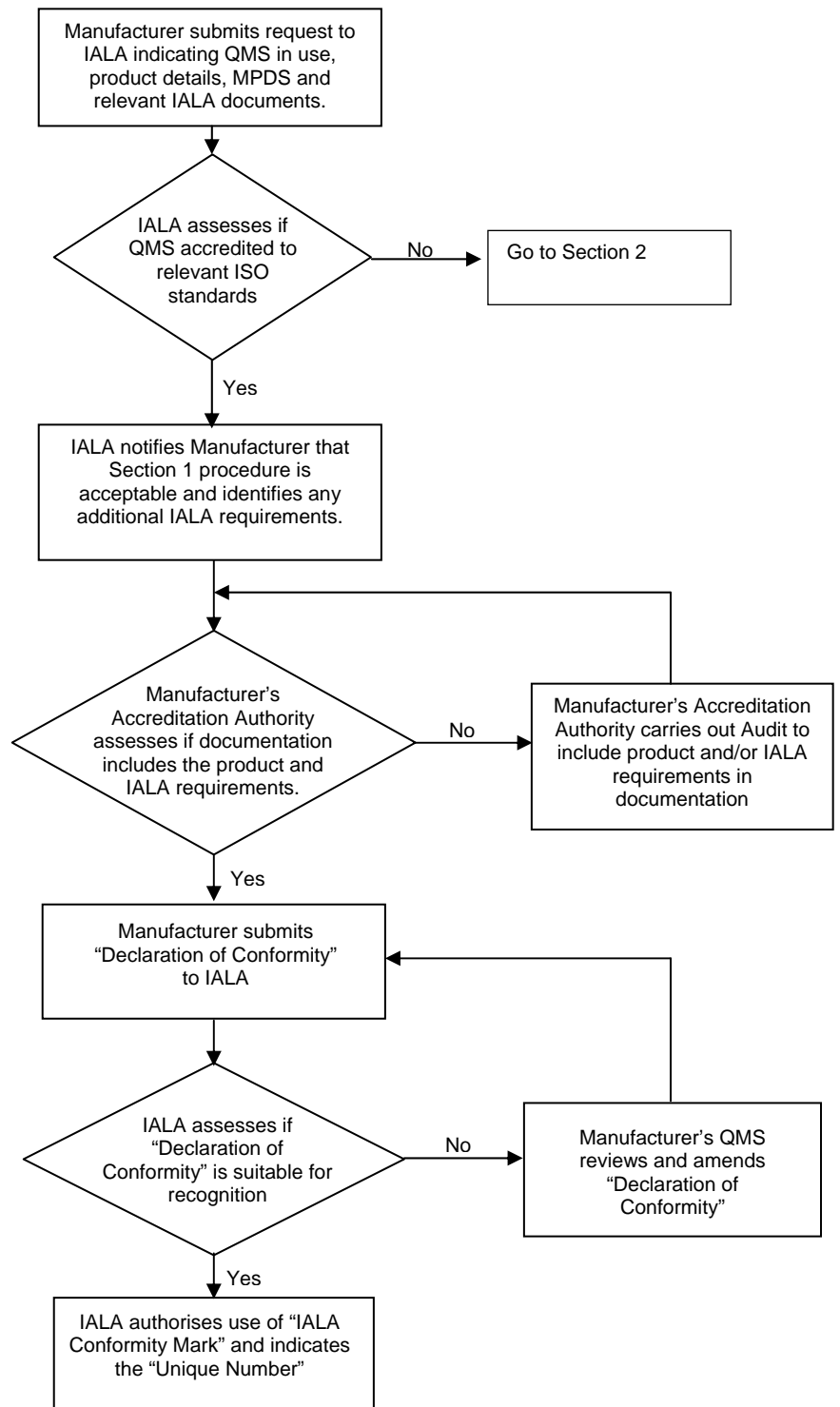


Figure 2 Flow Chart for Procedure for use with Quality Assurance Methods Accredited Relevant to ISO Standards.

1.5 Description and Use of the IALA Conformity Mark

The IALA Conformity Mark comprises the official IALA logo, a unique number as determined by IALA and the date on which the relevant Declaration of Conformity or Certificate of Conformity was issued. The unique number will include two or three initials that identify the manufacturer concerned, followed by a number not normally exceeding three figures that identify the specific product concerned.

Where the specifications concerned do not impose specific dimensions, the IALA logo should have a height in the order of 25 mm and width in the order of 12.5 mm. Use of larger or smaller sizes should be agreed with IALA and should retain the same proportions.

The IALA Conformity Mark should be affixed to the product or to its data plate. However, where this is not possible or not warranted on account of the nature of the product, it may be affixed to the packaging, if any, and to the accompanying documents, where the specifications concerned provides for such documents.

When applied to a product, the IALA Conformity Mark should be visible, legible and indelible. Monochrome presentation is acceptable.

When the manufacturer uses the marking in any documentation, the unique number shall accompany it.

The manufacturer is responsible for the proper use of the IALA Conformity Mark.

The IALA Conformity Mark is to be the only marking which certifies that products conform to the IALA Product Certification Procedure.



Unique Number Date of issue of the Declaration or Certificate of

Figure 3 Example of an IALA Conformity Mark

2 PROCEDURE FOR USE WITH QUALITY ASSURANCE METHODS NOT ACCREDITED TO ISO STANDARDS

2.1 General

The procedure for the certification of products described in this Section applies to those manufacturers that do not have a Quality Management System (QMS) accredited to the standards of the relevant sections of the ISO 9000 Series. A flow chart of the procedure is provided in Figure 4.

The following abbreviations are used in this procedure:

“IALA-ACS”	A Classification Society approved by IALA under the process described in Annex 1 to carry out product certification in accordance with the procedure set out in this document.
“IALA-CNM”	A National Member, as described by the Constitution of IALA, that has the equivalent facilities and expertise as a Classification Society and is approved by IALA under the process described in Annex 1 to carry out product certification in accordance with the procedure set out in this document.
“IALA-PCA”	The IALA Product Certification Authority and may be either an IALA-ACS or an IALA-CNM.

The conformity assessment will be based upon the MPDS and applicable IALA Recommendations and IALA Guidelines.

Products for which a valid Certificate of Conformity has been issued by IALA to the manufacturer may be marked with the IALA Conformity Mark.

Manufacturers that are not accredited to the relevant ISO standards may have their own QMS. This QMS may be accredited to external standards other than ISO, or may be documented internally within the company. This section will include procedures for both of these cases.

2.2 Responsibilities

2.2.1 IALA

- 1 To ensure that the procedure operates for the benefit of National and Industrial Members of the Association.
- 2 To approve IALA-ACS to undertake the conformity assessments.
- 3 To maintain and publish a list of the IALA-ACS and IALA-CNM.
- 4 To prepare and approve appropriate IALA Recommendations and Guidelines including the Product Certification Templates.
- 5 On receipt of an application from a manufacturer for a product to be Certified in accordance with these Guidelines:
 - a assess the information provided on the Quality Assurance method used by the manufacturer, verify that the procedure described in this section applies, and notify the manufacturer accordingly. In the case where the

- manufacturer is accredited to an external source other than ISO, verify that the accreditation is up to date;
- b notify the manufacturer of the IALA Recommendations , Guidelines and Product Certification Templates that relate to the performance and standard of the product;
 - c notify the manufacturer of the Unique Number to be used on the IALA Conformity Mark on completion of the Certification Process.
- 6 To provide to the IALA-PCA nominated by the manufacturer, assessment instructions and an IALA Product Certification Template for use during the assessment of each product.
- 7 To maintain lists of all products for which Certificates of Conformity have been issued.

2.2.2 IALA PCA

- 1 To provide a unified service to all participating manufacturers.
- 2 To carry out the appropriate conformity assessment.
- 3 To request from the manufacturer only the technical documentation that is required solely for the purpose of the conformity assessment and to ensure the confidentiality of all information received in the course of the service.
- 4 To issue reports or certificates, as appropriate, on satisfactory completion of the conformity assessment.
- 5 To establish an appeals procedure for use when the equipment is assessed as not conforming to the IALA requirements.
- 6 To issue a Type Test Certificate on completion of the Type Approval Phase.
- 7 To issue a Certificate of Conformity on completion of the process
- 8 To undertake periodic audits of the manufacturer's quality management system.
- 9 To be responsible for all aspects of any part of a conformity assessment that is sub-contracted.

2.2.3 Manufacturers

- 1 To apply to IALA for assessment of the product. The application should provide the details that are, or will be, given in the Manufacturers Product Data Sheet, information on the Quality Management System in use at the site where the product is being, or will be, manufactured and the IALA Recommendations and Guidelines that have been taken into account during the design of the product.
- 2 To apply to the selected IALA-PCA for the assessment to be undertaken.
- 3 To provide the IALA-PCA with such technical documentation as is necessary for the product to be assessed for conformity.
- 4 To allow the IALA-PCA access for inspection and audit purposes to the locations of manufacture, inspection, testing, and storage.
- 5 To ensure that the IALA Conformity Mark complies with the guidance given in Section 1.5 of these Guidelines and is used only in relation to a product for which a Certificate of Conformity has been issued by IALA.
- 6 To ensure that the products continue to be designed and manufactured to the standard that was assessed in accordance with this procedure.

2.3 QMS assessment procedure

When the manufacturer has a QMS in place which is accredited to an external standard (national, international, other) the manufacturer shall supply relevant supporting documentation to the IALA-PCA for review and approval.

When a manufacturer has a QMS which is internally documented, but not accredited to an external standard, the manufacturer shall provide the internal documentation of the QMS to the IALA-PCA. In addition, the following procedure will apply.

The IALA-PCA will audit the manufacturer's QMS to assess that it ensures a satisfactory method of testing products and monitors that the production techniques maintain a satisfactory standard of product. The IALA-PCA will also carry out periodic audits for the purpose of monitoring the manufacturer's QMS.

The manufacturer's quality management system must be documented in a systematic and orderly manner in the form of written policies, procedures and instructions addressing the production of the product and its final inspection and testing. It must contain in particular an adequate description of:

- 1 The quality objectives and the organisational structure, responsibilities and powers of the management with regard to product quality;
- 2 The examinations and tests that will be carried out during and after manufacture;
- 3 The means to monitor the effective operation of the quality system, and;
- 4 Quality records, such as inspection reports and test data, calibration data, qualification reports of the personnel concerned.

The IALA-PCA will review the manufacturer's production quality system documentation and assess it to ensure that manufactured products will remain in conformity with the product to be certified. Random inspection and tests may be witnessed by the IALA-PCA where considered necessary to verify the effectiveness of the quality scheme.

A Certificate of Type Approval and Certificate of Conformity will be issued on the authority of the IALA-PCA for the products on successful completion of the review. The IALA-PCA will then forward these documents to IALA.

Subsequent visits, or audits, will be made periodically to verify that the manufacturer's QMS continues to ensure that manufactured products remain in conformity with the type approved product.

The manufacturer is required to keep IALA fully informed of any intended updating of the Quality Management System. IALA will inform the manufacturer if additional auditing in this case is required.

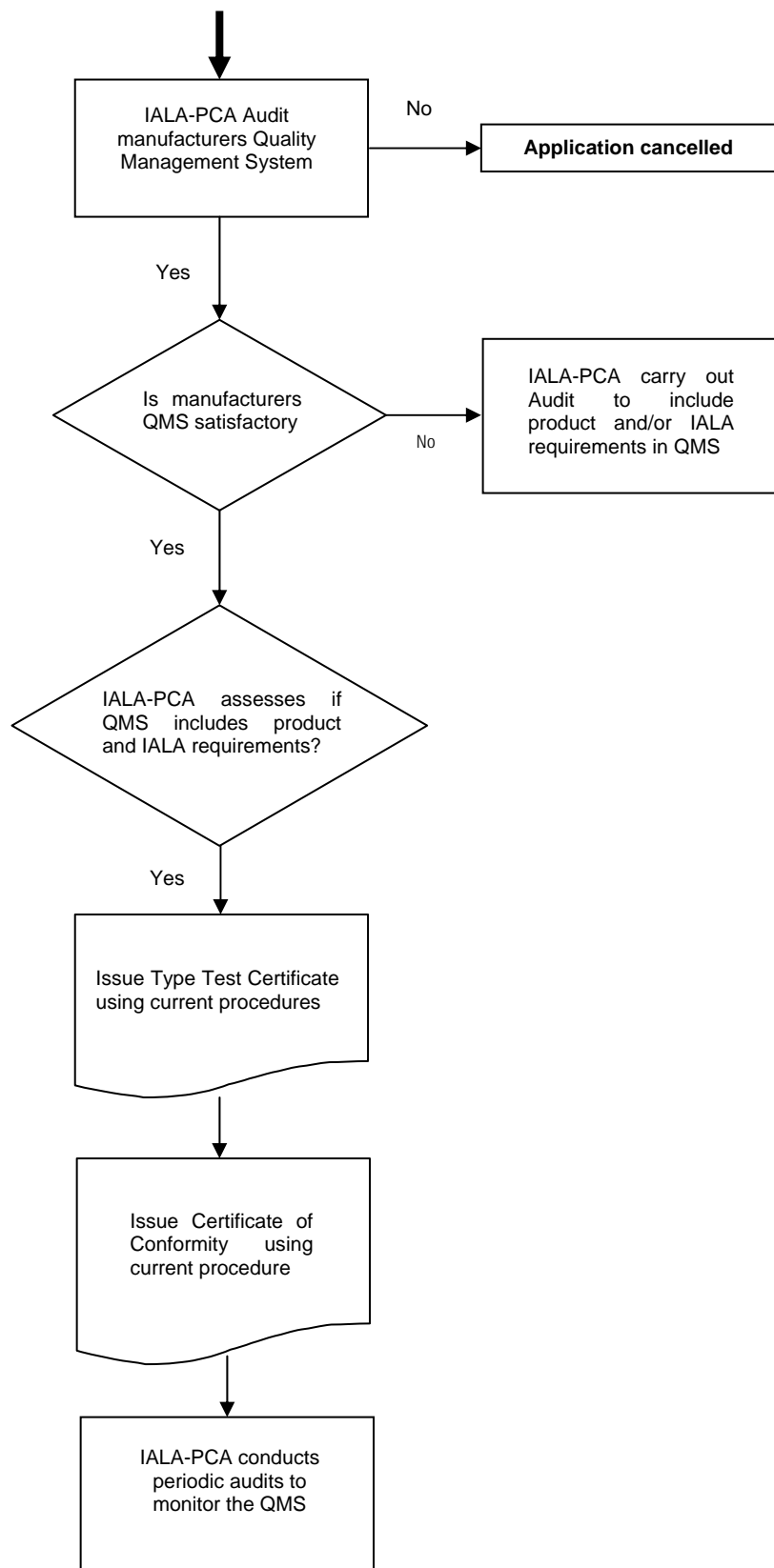


Figure 4 Flow Chart for Procedure for use with manufacturers non ISO 9000 series QMS

ANNEX I APPOINTMENT OF IALA APPROVED CLASSIFICATION SOCIETIES

A Classification Society may be approved by IALA to perform assessments for the certification of Marine Aids to Navigation products on its behalf subject to compliance with the following minimum conditions for which the Classification Society should submit complete information and substantiation.

1 GENERAL

The relative size, structure, experience and capability of the Classification Society to perform assessments of Marine Aids to Navigation should be demonstrated.

The Classification Society should be able to document extensive experience in assessing the design, construction, installation and operation of Marine Aids to Navigation equipment and, as applicable, manufacturer's quality management systems.² Specific Provisions.

For the purpose of being approved to perform certification services of marine aids to navigation products which require the ability to review applicable engineering designs, drawings, calculations and similar technical information and to conduct field survey and inspection to ascertain the degree of compliance of electrical and mechanical systems and components with such technical criteria, the following should apply:

- 1 The Classification Society should provide for the publication and systematic maintenance of rules and/or regulations for the design, construction and certification of marine aids to navigation products as well as the provision of an adequate research capability to ensure appropriate updating of the published criteria.
- 2 The Classification Society should allow participation in the development of its rules and/or regulations by representatives of IALA.
- 3 The Classification Society should have:
 - a A significant technical, managerial and support staff, catering also for capability of developing and maintaining rules and/or regulations; and
 - b A qualified professional staff to provide the required service representing an adequate geographical coverage and local representation as required.
- 4 The Classification Society should be governed by the principles of ethical behaviour, which should be contained in a Code of Ethics and as such recognise the inherent responsibility associated with a delegation of authority to include assurance as to the adequate performance of services as well as the confidentiality of related information as appropriate.
- 5 The Classification Society should demonstrate its technical, administrative and managerial competence and its capacity to ensure the provision of quality services in a timely fashion.
- 6 The Classification Society should be prepared to provide relevant information to IALA.
- 7 The Classification Society's management should define and document its policy and objectives for, and commitment to, quality and ensure that this policy

is understood, implemented and maintained at all levels in the Classification Society.

- 8 The Classification Society should develop, implement and maintain an effective internal quality system based on appropriate parts of internationally recognised quality standards no less effective than ISO 9000 series, and which, *inter alia*, ensures that:
 - a the Classification Society's rules and/or regulations are established and maintained in a systematic manner;
 - b the Classification Society's rules and/or regulations are complied with;
 - c the requirements of the certification work, for which the Classification Society is authorised, are satisfied;
 - d the responsibilities, authorities and interrelation of personnel whose work affects the quality of the Classification Society's services are defined and documented;
 - e all work is carried out under controlled conditions;
 - f a supervisory system is in place that monitors the actions and work carried out by the Classification Society;
 - g a system for qualification of surveyors and continuous updating of their knowledge is implemented;
 - h records are maintained, demonstrating achievement of the required standards in the items covered by the services performed as well as the effective operation of the quality system; and
 - i a comprehensive system of planned and documented internal audits of the quality-related activities in all locations is implemented.
- 9 The classification society should be subject to certification of its quality system by an independent body of auditors recognised by IALA.

1.1 Additional Considerations

For the purpose of performing certification services for marine aids to navigation products which require the ability to assess by audit and similar inspection of the relevant manufacturer's quality management system attributes, the following should, in addition, apply:

- 1 The provision and application of proper procedures to assess the degree of compliance of the applicable quality management system;
- 2 The provision of a systematic training and qualification regime for its professional personnel engaged in the quality management system certification process to ensure proficiency in the applicable quality and management criteria as well as adequate knowledge of the technical and operational aspects of manufacturers safety management; and,
- 3 The means of assessing through the use of qualified professional staff the application and maintenance of manufacturers quality management systems.

* * *