

**IALA GUIDELINES**  
for  
**THE ACCREDITATION**  
**OF**  
**VTS TRAINING INSTITUTES**



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## **GUIDELINES FOR THE ACCREDITATION OF VTS TRAINING INSTITUTES**

### **1. Introduction**

These Guidelines set out the process by which VTS Training Institutes can achieve accreditation to conduct education training leading to the issue of:

- VTS Operator's Certificates in accordance with IALA Recommendation V-103 and Model Course V-103/1, Basic Training for VTS Operators; or,
- VTS Supervisor's Endorsement in accordance with IALA Recommendation V-103 and Model Course V-103/32, Advancement Training.

Procedural requirements for the audit process leading to accreditation are given in Annex 1.

An example of a Certificate of Accreditation and information on how it should be completed is given in Annex 2.

A quality system model for Training Institutes is given in Annex 3.

### **2. Aim**

The aim of these IALA Guidelines is to ensure conformance with the pertinent requirements of IALA Recommendation V-103, "Recommendation on Standards for Training and Certification of VTS Personnel" as applied to the provision of training for qualification of VTS Operators, VTS Supervisors and VTS Managers.

### **3. Objectives**

The objectives are to ensure that all training and assessment of VTS personnel for the purpose of certification and/or endorsement is:

- structured in accordance with established training procedures based on clearly communicated, measurable and achievable objectives;
- able to ensure that the standard of competence as indicated in IALA Recommendation V-103 is met and maintained;
- conducted, monitored, evaluated and supported by qualified instructors as indicated in Chapter 3.4 of IALA Recommendation V-103;
- managed in a manner that ensures relevancy and accuracy according to experience gained, technological advances, national and international recommendations, rules and regulations.

### **4. General Requirements**

VTS training should be conducted in accordance with model courses developed by IALA. Organisations providing VTS training should provide training services within the framework of a training management system which fulfils the requirements of an approved quality system standard.

Training institutes must be accredited in accordance with these "IALA Guidelines for the Accreditation of VTS Training Institutes" in order to be approved as an Accredited Training Institute.

## 5. Accreditation

VTS Training Institutes that comply with these Guidelines may receive a “Certificate of Accreditation” issued by:

- a Classification Society approved for this purpose by IALA and recognised by a competent authority to perform accreditation functions on behalf of the competent authority, or,
- a “Competent Authority” of the country in which the VTS Training Institute is located, provided the organisation responsible for the Competent Authority is a Member of IALA<sup>1</sup>.

To obtain a Certificate of Accreditation an application should normally be made by a VTS Training Institute to an IALA Approved Classification Society (IALA-ACS). Details of the Classification Societies approved by IALA for purposes of Accreditation are given on Page 7.

A VTS Training Institute may apply to the Competent Authority of the country in which it is located, provided the organisation responsible for the Competent Authority is a Member of IALA. However, in this case, the Certificate of Accreditation will apply only to the training of VTS personnel to operate in the country concerned unless reciprocal arrangements that are properly documented have been made formally with the Competent Authority of another country or countries.

The Accreditation process is described in Annex 1 – Procedural Requirements for the Audit Process.

Accreditation is valid for a period of five years subject to periodic audits of the Training Institute. A periodic audit should be performed between the second and third anniversary of the initial accreditation and include Phase 2 and Phase 3 audit activities, as described in Annex 1. However, this interval may be reduced if considered necessary by the Competent Authority.

Accreditation should be renewed every five years. Renewal audits consist of Phase 1, 2 & 3 audit activities, as described in Annex 1, and should be performed within 6 months of expiration of accreditation.

An example of a Certificate of Accreditation, the information to be contained on a Certificate and how it should be compiled is given in Annex 2.

## 6. Interim Accreditation Arrangements

In order to facilitate the start-up operation of new training institutes, interim accreditation may be provided. Interim arrangements provide for accreditation of training provided to students participating in the initial presentation of training curricula.

Interim accreditation is based upon:

- satisfactory completion of Phase 1 audit activities;
- validation of instructor qualifications;
- plans for full implementation of the system by the time of the initial accreditation assessment;
- familiarity of key training management system (TMS) personnel with the implementation plans.

Interim accreditation of a training course will be valid only for the first presentation of the course during which the initial accreditation audit shall take place.

Training institutions having achieved interim accreditation will not be required to repeat Phase 1 activities prior to the Phase 2 audit.

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<sup>1</sup> *It is recommended that for the purposes of accreditation, Competent Authorities consider the use of Classification Societies approved by IALA (IALA-ACS)*

## 7. Responsibility and Recognition

Audits and accreditation of training institutions is the responsibility of the Competent Authority. Audit and accreditation activities may be performed in whole or in part by organisations recognised by the competent authority to perform such services on their behalf.

## 8. Practices and procedures/scheme of work

The VTS Training Institute should:

1. Plan the teaching and training process that directly influences the quality of teaching and learning, and ensure that these processes are properly carried out.
2. Establish and maintain documented procedures that specify:
  - the approach to planning and application of course plans and lesson plans including use of teaching principles, methods and equipment in classrooms and simulator rooms;
  - control and assessment activities put in place to ensure trainees acquire the necessary levels of competence for each module of the appropriate model course;
  - appropriate training facilities to meet the documented training objectives;
  - maintenance procedures for the training facilities' equipment;
  - qualifications and competence requirements of Instructors and Assessors;
  - adherence to appropriate health and safety requirements and regulations.
3. Ensure all aspects of study progression are documented and disseminated to trainees, VTS authorities and course managers as required.
4. Continually control and evaluate teaching activities to ensure the learning results are in accordance with the appropriate course plan.
5. Ensure that trainees who present themselves for final tests, examination, simulation evaluations or equivalent, have completed all the required course work and exercises, including simulator exercises where appropriate.
6. Establish procedures for the maintenance and use of equipment during the training in order to ensure that:
  - equipment and systems are maintained in accordance with the manufacturers instructions and, where appropriate, calibrated as and when necessary;
  - equipment and systems are operated in a safe and efficient manner;
  - working conditions in the training environment, such as lighting, ventilation, lighting and heating, conform to appropriate rules and regulations.
7. Any consumable stores necessary to maintain equipment and systems in full working order are properly controlled and stored. Where the consumable stores could lead to pollution of the environment, the procedures should reflect workplace hazardous materials requirements.

## 9. Training results

The VTS Training Institute should:

1. Carry out final assessment and arrange for final moderation.
2. Ensure that all final control and testing is carried out in accordance with the course plan, or other documented procedures, so that proof of the training results in accordance with the requirements specified in IALA Recommendation V-103 and the appropriate Model Course is complete.
3. Record training results and retain these as evidence that the competence of trainees is tested and controlled. These records should indicate the results obtained by trainees for each “subject area” of each module of the appropriate model course.
4. If so warranted, clearly identify and carry out an assessment of prior learning to ensure all competencies, as indicated in IALA Recommendation V-103, are met.
5. Establish, document and maintain procedures for any complaint received. Responsibilities for reviewing, handling and following-up complaints should be defined.

\* \* \*

## Definitions

**Approved quality system standard** is the documented criteria approved by IALA, or by an IALA Approved Classification Society, against which the training management system of a VTS Training Institute is compared.

**Audit** is a systematic and independent examination to determine whether the Training Management System activities and related results comply with planned arrangements and whether these arrangements are suitable to achieve objectives and are implemented effectively.

**Accredited training programme** is a course of study comprising basic or advancement training at an Accredited Training Institute and “on-the-job” training carried out at the appropriate VTS Centre.

**Accredited Training Institute** is an establishment approved by the Competent Authority for the purposes of carrying out basic or advancement training of VTS Personnel and in possession of a valid Certificate of Accreditation.

**Advancement Training** is training given at an Accredited Training Institute to the standards described in Table 2 (VTS Supervisor Competence Chart) of V-103, “Recommendation on Standards for Training and Certification of VTS Personnel” and Model Course V-103/2.

**Basic Training** is training given at an Accredited Training Institute to the standards described in Table 1 (VTS Operator Competence Chart) of V-103, “Recommendation on Standards for Training and Certification of VTS Personnel” and Model Course V-103/1.

**Competent Authority** is an authority made responsible, in whole or in part, by the Government for the safety, including environmental safety, and efficiency of vessel traffic and protection of the environment.

**Competence** is the ability to perform defined tasks or duties effectively.

**On-the-Job Training** is training and familiarisation at the VTS Centre at which the person will be employed. It includes training on the particular services provided by the VTS, the facilities and equipment used as well as the local geography and appropriate port regulations and procedures.

**Simulated Training** is the simulation of operational events, practices and procedures to assess the ability of candidates to demonstrate their levels of competence.

**Student** is a VTS Operator or VTS Supervisor candidate.

**The Organisation** refers to the training institute or to a VTS Centre performing on-the-job training.

**Training Institute** is an organisation carrying out basic or advancement training of VTS Personnel.

**Training Management System (TMS)** is a quality management system designed with the objective of ensuring the proper training and competence of VTS personnel; in accordance with the applicable requirements detailed within Model courses V-103/1 and V-103/2.

**VTS Authority** is the authority with responsibility for the management, operation and co-ordination of the VTS, the interaction with participating vessels and the safe and effective provision of the service.



**VTS Certification Log** is a record of certificates and endorsements awarded to VTS Personnel.

**VTS Operator Certificate** is a certificate awarded by a Competent Authority on successful completion of Basis Training; it entitles the authorised holder to serve in the capacity of a VTS Operator and perform the functions for which endorsements have been made.

**VTS Personnel** are persons trained in VTS operations and holding appropriate qualifications issued by, or on behalf of, a Government or a Competent Authority. Two levels of skills, knowledge and competence of VTS Personnel are set out in V-103. The two levels are described as VTS Operator and VTS Supervisor.

## References

Recommendation on Standards for Training and Certification of VTS Personnel - IALA Recommendation V-103, May 1998.

Vessel Traffic Services Operator Basic Training, Model Course V-103/1, March 1999.

Vessel Traffic Services Supervisor Advancement Training, Model Course V-103/2, [March 2000].

Vessel Traffic Services On-the-Job Training, VTS Operator, VTS Supervisor, Model Course V-103/3, March 1999.

## IALA Approved Classification Societies

For the purpose of these Guidelines the following Classification Societies have been approved by IALA for the purpose of carrying out audits of VTS Training Institutes leading to the award of a Certificate of Accreditation.

American Bureau of Shipping,  
Two World Trade Center,  
106<sup>th</sup> Floor,  
New York,  
NY10048,  
United States of America

Bureau Veritas,  
17 bis, Place des Reflets,  
La Defense 2,  
92400 Courbevoie,  
France

Lloyds Register,  
Lloyds Register of Shipping,  
100 Leadenhall Street,  
London EC3A 3BP,  
United Kingdom.

**ANNEX 1 -**  
**Procedural Requirements for the Audit Process**

## **1. Introduction**

The audit process is designed to ensure that:

- a) training is being provided within a functioning training management system based upon an approved quality system standard;
- b) instructors and examiners are properly qualified to provide training and assess competency of students; and
- c) course materials and curricula comply with the IALA requirements.

The audit process is conducted in three phases that are described in sections 2, 3 and 4 respectively.

## **2. Phase 1**

Phase 1 consists of an audit of:

- a) the training management system documentation against the requirements of an approved quality system standard;
- b) the curricula and course materials against the requirements of the IALA model courses and any requirements of the Competent Authority;
- c) the internal audit program.

Note: It is preferable to perform Phase 1 audits on site. However Phase 1 audits may be performed at a remote location when practicable.

Phase 1 activities should be conducted sufficiently in advance of the Phase 2 audit to allow the training institution ample time to correct any Phase 1 deficiencies prior to the commencement of Phase 2.

### **2.1 TMS documentation review**

The TMS documentation should be reviewed against the requirements of an approved quality management system standard. The review should also confirm that there are provisions in the documented training management system for:

- a) developing new or additional curricula;
- b) updating existing curricula in accordance with changes made by IALA to VTS training requirements; and
- c) incorporating changes to curricula and course material in response to technological progress and developments in national and international legislation.

The reviewer should identify any areas where the documented training management system has not adequately addressed requirements of the approved quality system standard.

## 2.2 Training course materials and curricula review

The curricula and course materials should be reviewed against the requirements of the IALA model courses and any requirements of the Competent Authority. The reviewer should identify any areas where the curricula and course materials have not adequately addressed requirements of the model course and the Competent Authority.

## 2.3 Review of instructor and examiner qualifications

Evidence of instructor and examiner qualifications should be reviewed to ensure their qualifications are suitable for the functions they perform. In the event that the Phase 1 audit is performed at a location other than the Training Institute, copies of instructor and examiner qualifications may be utilised.

## 2.4 Review of internal audit program

The Training Institute's internal audit program schedule should be examined to ensure that a complete audit of the management system and training activities will be completed prior to initiation of the Phase 2 audit.

## 2.5 Reporting

The results of Phase 1 audit activities should be documented in a report. The report should identify the names of the documents reviewed, and summarise the results of the phase 1 audit.

The reviewer should identify any deficiencies in the TMS documentation, course curricula, course materials, or instructor qualifications. The Training Institute should be responsible for correcting the deficiencies and reporting the proposed corrective actions to the reviewer for acceptance prior to the Phase 2 audit. If the proposed corrective actions are acceptable, the reviewer should, by documented correspondence with the Training Institute, indicate acceptance of the proposed corrective actions and closure of the documentation review.

# 3 Phase 2

Phase 2 consists of:

- a) audit planning and scheduling;
- b) an audit of the effective implementation of the documented training management system; and,
- c) reporting.

## 3.1 Audit planning and scheduling

The Phase 2 audit should be conducted in accordance with an audit plan. The audit plan should be developed in co-ordination with the Training Institute, and utilising knowledge gained during Phase 1.

Where Phase 1 activities are conducted on site, the audit plan may be developed with the direct participation of the Training Institute at the close of the Phase 1 activities. Where Phase 1 activities are not conducted on site, the audit plan should be developed in liaison with the Training Institute.

The audit plan should:

- a) indicate the names of persons with key responsibilities within the training management system;

- b) identify the training management system documentation;
- c) identify the training course curricula and materials;
- d) indicate the name(s) of the auditor(s);
- e) indicate the language of the audit;
- f) identify any unique requirements of the Competent Authority relevant to the audit;
- g) identify the organisational units or functions to be audited;
- i) indicate the date(s) and place(s) of the audit;
- j) identify the activities to be audited;
- k) identify location(s) to be audited;
- l) schedule meetings and times of their opening and closing;

The audit plan used for the audit prior to the issue of an Accreditation certificate should be reviewed and up-dated as necessary for periodic audits.

### 3.2 Audit

The audit should determine the effective functioning and implementation of the training management system and verify conformity with documented procedures and instructions. The audit should be scheduled to coincide with appropriate training activities in order that training activities may be monitored.

The audit should consist of:

- a) an opening meeting;
- b) review internal audits;
- c) review management review reports;
- d) review corrective action system including customer complaints and outstanding non-conformities and observations;
- e) review changes to TMS;
- f) review changes to management responsibility and authority;
- g) confirmation of instructor/examiner qualifications (if Phase 1 was conducted off site);
- h) examination of programmed areas/activities including onsite monitoring of training delivery activities;
- i) review of training records;
- j) preparation of draft programme for next visit;
- k) closing meeting.

The opening meeting should include the introduction of the audit team, a brief review of the audit process, and a review of the audit plan. The audit plan should be revised, if necessary, during the opening meeting to accommodate reasonable contingencies prior to proceeding with the audit.

The audit should proceed with interviews of personnel with key responsibility within the TMS, a review of pertinent records, and observance of training delivery activities.

Where phase 1 activities have been conducted at a location other than the Training Institute, the auditor should review and confirm the authenticity and validity of instructor/examiner certificates and records of qualifications.

Appropriate portions of training should be monitored to confirm effectiveness. The instructor's delivery, the interaction between instructor and students and the student competency verification activities should be observed.

The auditor should review records resulting directly from training including those relating to:

- a) student progress;
- b) student feedback on instructor performance;
- c) evidence of student competence.

Appropriate observations of conformance and non-conformance should be recorded for later use in developing an audit report.

At the closing meeting the results of the audit, including the non-conformities identified, the remedial action to be taken and the recommendation regarding accreditation, should be reviewed with representatives of The Organisation.

### 3.3 Reporting

The results of Phase 2 audit activities should be documented in a report.

The report should:

- a) summarise the results of the phase 2 audit;
- b) include identified non-conformities;
- c) indicate requirements for timely corrective action and any follow-up activities
- d) indicate the recommendation for accreditation

Where practicable, the audit report should be prepared for presentation at the closing meeting.

## 4 Phase 3

Phase 3 audit relating to the audit process for the issuance of an Accreditation Certificate differs from the Phase 3 audit relating to a periodic audit. The differences concern the actions to be taken on non-conformities and on satisfactory completion of the audit.

### 4.1 Audit for issuance of an Accreditation Certificate

Phase 3 consists of:

- a) audit follow-up activities
- b) issuance of Accreditation Certificate

The Training Institute is responsible for correcting any deficiencies identified during the audit. The Training Institute should report proposed corrective actions to the auditor for review and acceptance. The auditor should review the proposed corrective actions submitted by the Training Institute and determine their acceptability. If the proposed corrective actions are acceptable, the auditor should, by documented correspondence with the Training Institute, indicate the acceptability of the proposed corrective actions. Depending on the nature of the non-conformities the auditor may require a follow-up audit to confirm effectiveness of the implemented corrective actions.

Upon satisfactory closure of audit activities an Accreditation Certificate valid for a period of five years, subject to periodic audit of the TMS, should be issued to the Training Institute.

#### 4.2 Periodic audit

Phase 3 consists of:

- a) audit follow-up activities
- b) endorsement of the Accreditation Certificate

The Training Institute is responsible for correcting any deficiencies identified during the periodic audit. The Training Institute should report proposed corrective actions to the auditor for review and acceptance. The auditor should review the proposed corrective actions submitted by the Training Institute and determine their acceptability. If the proposed corrective actions are acceptable, the auditor should, by documented correspondence with the Training Institution, indicate the acceptability of the proposed corrective actions. Depending on the nature of the non-conformities the auditor may require a follow-up audit to confirm effectiveness of the implemented corrective actions or, in the case of major non-conformities, recommend that the Accreditation Certificate be suspended until corrective action has been undertaken successfully.

Upon satisfactory closure of the periodic audit activities an endorsement should be made on the Accreditation Certificate.

\* \* \*

## ANNEX 2

### Example of a Certificate of Accreditation

#### **Compilation of a Certificate of Accreditation**

The issuing authority should complete the texts in Italics in the example in the following manner:

1. *“Enter number”* A serial number should be inserted that comprises of two or three initials that identify the issuing authority, followed by a three figure number, commencing with “001”. For example, the third Certificate issued by Lloyds Register could be numbered “LR 003”. The number should be inserted on both pages 1 and 2.
2. *“Enter Name of Training Institute”*. The full name of the Institute, as given in their official documentation should be inserted.
3. *“Enter address of the Training Institute”*. The full address of the Institute, as given in their official documentation should be inserted. This may not necessarily be address where the audit took place or where the training will be given.
4. *“Enter dates of audit”*. The dates on which the audit started and when it was completed satisfactorily should be inserted.
5. *“Enter name of signatory”*. The title, full name and position in the organisation should be inserted.
6. *“Enter name of Competent Authority or IALA-ACS”*. The full name of the organisation issuing the Certificate should be inserted.
7. *“Enter date of Certificate”*. The date on which the Certificate is awarded should be inserted. This may not necessarily be the same as the date on which the audit was completed.
8. *“Enter expiry date”*. The date to be inserted should normally be five years less one day after the date on which the Certificate was awarded.
9. *“Enter dates”*. The first date to be inserted should normally be two years after the date on which the Certificate was awarded. The second date to be inserted should be one year after the first date inserted.

#### **Training courses Certified**

In the table headed “For the following training course(s)”, a cross “X” should inserted in the last column for the training course(s) that have been satisfactorily audited. A VTS Training Institute may be accredited for either one or for both courses. Where the VTS Training Institute is accredited for both courses, but the audits took place at different times, separate Certificates should be issued. However, efforts should be made to harmonise subsequent audits where this is practicable.

#### **Distribution of Certificates of Accreditation**

In addition to copies of the Certificates of Accreditation being issued to the VTS Training Institute concerned, the appropriate Competent Authority or IALA-ACS should retain one copy and one copy should be sent to IALA Headquarters.

\* \* \*



# Certificate of Accreditation of a V.T.S. Training Institute

Logo of issuing  
Competent  
Authority or  
IALA Approved  
Classification  
Society  
(ACS)

## Certificate Number

*Enter number*

### This is to certify that:

*Enter Name of Training Institute*

*Enter address of the Training Institute*

**Has been audited during the period** *Enter dates of the audit* **against**  
**the requirements of, and found to be in compliance with, the**

**IALA Guidelines for the Accreditation of VTS Training Institutes**

**For the following training course(s)**

#### Model Course

Vessel Traffic Services Operator Basic Training,	V-103/1 March 1999	X
Vessel Traffic Services Supervisor Advancement Training,	V-103/2 March 2000	X

**Issued by** *Enter name of signatory* **on behalf of** *Enter name of Competent Authority or IALA-ACS*

**on** *Enter date of certificate* **and valid until** *Enter expiry date* **, subject to**  
**periodic audit(s) as required.**

\_\_\_\_\_  
Authorised Signature

**The attached page 2 forms part of the certificate**



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Space for any specific conditions of the Competent Authority or Classification Society

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# Certificate of Accreditation of a V.T.S. Training Institute

Logo of issuing  
Competent  
Authority or  
IALA Approved  
Classification  
Society  
(ACS)

**Certificate Number** *Enter number*

## Page 2 - Periodic and Additional Audits

### Planned Periodic Audit

To be carried out between	Date audit carried out	Name of Auditor	Signature & Stamp
...../...../..... and ...../...../..... <i>Enter dates</i>			

### Additional Audits

Purpose and authorisation	Date audit carried out	Name of Auditor	Signature & Stamp

## ANNEX 3

### Quality System model for Training Institutes

#### **1. Introduction**

This Quality System model for Training Institutes serves as an “Approved quality system standard” for training of VTS Personnel. This standard focuses strictly on the quality provision of training and should be applied both to VTS Operator Basic and VTS Supervisor Advancement training provided at Training Institutes. It could also be applied to on-the-job training provided at VTS Centres.

This standard is compatible with other existing quality system standards and the requirements identified within it can easily be incorporated into existing quality systems. The standard does however, constitute a model for compliance with other quality system standards; its requirements identify those issues having the most significant impact on the successful training of VTS Personnel.

Training Institutes that have already implemented a formal quality system should use this standard to ensure that their system adequately addresses relevant training concerns. Training Institutes that have not implemented a formal quality system should use this standard as the basis for the development of a quality training system.

An audit of a quality training system is to include the issues identified by the requirements of this standard.

##### 1.1 Scope

This standard applies to Organisations that provide training to, and verify the competence of, individuals seeking qualifications as VTS Operators and VTS Supervisors in accordance with the provisions of IALA Recommendation V-103, “Recommendation on Standards for Training and Certification of VTS Personnel,” May 1998. Training Institutes should establish, implement, and maintain a TMS to ensure that students are provided the training necessary training to achieve the required competence for which qualifications are being sought. This standard applies to those functions of the Organisation that have an impact on the training and qualification of VTS personnel.

#### **2. Training management requirements**

##### 2.1 Quality policy

The senior management of the Organisation should define and document its policy for quality. The quality policy should:

- a) take into account the overall goals and objectives of the Organisation pertaining to the training of VTS Operator and VTS Supervisor candidates.
- b) be relevant to:
  - student training needs; and
  - applicable requirements of V-103 and the appropriate model course;
- c) express the commitment of the Organisation to achieving its goals and objectives and to fulfilling the training needs of the student.

Senior management should ensure that this policy is understood, implemented and maintained at all levels of the Organisation.

## 2.2 Organisational arrangements

### 2.2.1 Responsibility and authority

The responsibility, authority and interrelation of all personnel including management, instructors, examiners and support staff, who perform and verify work affecting training should be defined and documented. Particular attention should be paid to personnel who need the organisational freedom to:

- a) initiate action to prevent the occurrence of any non-conformities relating to the TMS;
- b) identify and record any problems relating to the TMS;
- c) initiate, recommend or provide solutions to identified problems through designated channels;
- d) verify the implementation of solutions;
- e) identify pertinent changes to student training and competence requirements and initiate action to incorporate appropriate changes to VTS training programs.

### 2.2.2 Management representative

The senior management of the Organisation should appoint a member of its own management who, irrespective of other responsibilities, should have defined authority for:

- a) ensuring that the TMS is established, implemented and maintained in accordance with this standard;
- b) reporting on the performance of the TMS to the management of the Organisation for review and as a basis of improvement.

## 2.3 Internal TMS audits

The Organisation should establish and maintain documented procedures for planning and performing internal audits in order to verify whether activities comply with the requirements of the TMS.

Internal audits should be scheduled on the basis of the importance of the activity with respect to student training. Personnel independent of those having direct responsibility for the area being audited should carry out internal audits. The complete TMS should be effectively audited at least annually.

The results of internal audits should be provided to personnel having assigned responsibility for the activity and the authority to perform corrective action where deficiencies are noted. Responsible personnel should perform timely corrective action on deficiencies discovered during the internal audit.

Follow-up audits should be conducted to verify and record the effectiveness of corrective action taken.

Records of internal audits should be maintained (see 2.16).

## 2.4 Corrective and preventive action

The Organisation should:

- a) establish and maintain documented procedures for the identification and correction of TMS deficiencies;
- b) review appropriate sources of information, such as non-conformance reports, audit reports, student and customer complaints, and quality records to detect and eliminate potential deficiencies;

- c) analyse student learning deficiencies for adverse trends that shall indicate a deficiency in the training plan or training delivery procedures;
- d) determine the root cause of deficiencies and implement corrective action to eliminate the deficiency.

Records of these activities should be maintained. (see 2.16)

## 2.5 Management review

Senior management of the Organisation should review the TMS in accordance with documented procedures in order to ensure its continuing suitability and effectiveness in satisfying the organisation's quality policy and training needs of the students. Internal management review should include the review of internal and external audit reports, reports of non-conformities and corrective actions taken and their effectiveness. Management should determine the need for any changes to policy or the TMS based upon the results of this review. Management review should be conducted at least annually. Records of management reviews should be maintained (see 2.16).

## 2.6 TMS requirements

### 2.6.1 General

The Organisation should establish, document, and maintain a TMS in conformance with the requirements of this standard as a means of ensuring that students are trained in accordance with the requirements of pertinent model courses and any additional requirements of the Competent Authority.

### 2.6.2 Training Management Manual

TMS documentation should include a Training Management Manual. The Training Management Manual should at a minimum provide:

- a) a copy of the quality policy
- b) an overview of the TMS of the Organisation;
- c) an outline of the documentation structure of the TMS;
- d) cross references to the requirements of this standard; and
- e) references to pertinent TMS documentation.

### 2.6.3 TMS procedures

The Organisation should:

- a) document procedures consistent with the requirements of this standard and the stated quality policy; and
- b) effectively implement the TMS and its documented procedures.

The level of detail provided in TMS procedures should be appropriate to the level of:

- a) complexity of training and support functions;
- b) the skills of instructors and support personnel; and
- c) internal TMS training provided to organisation personnel.

## 2.7 Document and data control

### 2.7.1 General

The Organisation should establish and maintain documented procedures for the control of all documents and data, including those of external origin, that relate to the requirements of this standard, V-103 and the Competent Authority.

#### 2.7.2 Document and data approval and issue

TMS documentation should be reviewed and approved for adequacy by authorised personnel prior to issue. Document and data control procedures should ensure that:

- a) all documents and data are reviewed and approved for adequacy by authorised personnel;
- b) personnel involved in review are provided with appropriate reference materials and background information upon which to base their approval;
- c) the revision status of TMS documents can be readily identified;
- d) pertinent TMS documents are available at all locations where work essential to the TMS is performed;
- e) instructor's manuals and materials, and materials issued to students are current;
- f) invalid or obsolete documents are removed from all points of use;
- g) obsolete documents retained for historical purposes are suitably identified and stored in order to preclude unintended use;
- h) records of changes are maintained. (see 2.16)

#### 2.7.3 Storage of Materials

Where appropriate, the Organisation should establish and maintain documented procedures for storage of training materials to preclude damage or deterioration.

### 2.8 Resources

#### 2.8.1 Resources identification

Senior management of the Organisation should identify and provide resources required to manage, support, conduct, and verify training activities. Resources at a minimum shall include:

- a) suitably qualified and trained personnel (i.e., instructors, examiners, etc.);
- b) facilities, equipment and materials essential to the support of the TMS.

#### 2.8.2 Training of Personnel of the Organisation

The Organisation should establish and maintain documented procedures for identifying the training needs of personnel performing management, training, examination and support functions. The organisation shall arrange for required training.

All personnel directly involved in student training activities should have satisfactorily completed pertinent instructor training requirements prior to undertaking training responsibilities.

## 2.9 Purchasing

### 2.9.1 General

The Organisation should establish and maintain documented procedures to ensure that essential services, facilities, equipment and materials supporting training comply with requirements including that:

- a) subcontracted instructors are suitably qualified;
- b) external facilities utilised in the training of students comply with the requirements of the applicable training plan; (see 2.10.3)
- c) equipment purchased for training is suitable for the applicable training plan;
- d) subcontracted organisations providing part or all of the training meet the requirements of the training plan.

### 2.9.2 Evaluation of subcontractors

Subcontractors should be evaluated on their ability to fulfil subcontract requirements. The Organisation should define subcontractor evaluation criteria and methods. The criteria applied and methods of evaluation should be appropriate to the impact of the service, facility, equipment or material on the training provided.

## 2.10 Training development

### 2.10.1 Training course development

The Organisation should establish and maintain documented procedures to control and verify the development of training courses in order to ensure that training requirements are met. Training course development should ensure that:

- a) responsibility and authority for training course development and review activities are assigned to qualified personnel;
- b) requirements of the pertinent model course and the Competent Authority are taken into account;
- c) training course objectives are defined in terms of targeted qualifications;
- d) student knowledge and competence requirements are taken into account;
- e) the appropriate use of simulators is taken into account;
- f) appropriate reference documents are made available to persons involved in training course development;
- g) materials are reviewed by pertinent functions within the organisation;
- h) ambiguities within training course documentation are resolved;
- i) training course documentation review is controlled.

Records of training course development should be maintained. (see 2.16)

### 2.10.2 Training course description

The Organisation should identify and document descriptions of each training course provided. Each training course description shall include the goals and objectives of the course, a course outline, a course schedule and the certificate or endorsement to be issued upon successful completion of the course.

### 2.10.3 Training plan

The Organisation should plan how requirements for training shall be met. Training plans for each course should be defined and documented and include:

- a) a description of the training course; (see 2.10.2)
- b) prerequisite student qualifications;
- c) identification of required resources;
- d) instructor and/or examiner qualification requirements;
- e) instructor to student ratio;
- f) references to the course materials and applicable TMS procedures and documentation;
- g) procedures or instructions specific to delivery of the course;
- h) criteria for, and methods of evaluating student competence, knowledge, understanding, and proficiency as documented in Recommendation V-103.

**Note:** Instructor and/or examiner qualifications should include appropriate skills in the use of simulators for instruction and verification of competence.

### 2.11 Training support procedures<sup>1</sup>

The Organisation should establish and maintain documented procedures for functions that support the delivery of training. The organisation should identify and plan these activities and ensure that they are conducted under controlled conditions. Controlled conditions include:

- a) documented procedures where their absence could adversely affect training;
- b) use and availability of suitable equipment and facilities;
- c) maintenance of facilities and equipment that have a direct impact upon training.
- d) observance of documented safety procedures

### 2.12 Application review

The Organisation should establish and maintain documented procedures for reviewing the qualifications of applicants. The review should:

- a) identify the qualifications sought by the applicant;
- b) evaluate applicant's stated qualifications against prerequisite requirements for the pertinent training course;
- c) determine suitability of the training course for providing qualifications sought by the applicant
- d) communicate with the applicant regarding suitability of course(s) and curricula offered to fulfill the students qualification needs.

Records of application review shall be maintained (see 2.16).

### 2.13 Verification of Student's competence

#### 2.13.1 General

The Organisation should establish and maintain documented procedures for training verification activities.

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1. Procedures that are not course specific, but apply to the support of multiple courses, are generally encompassed within the context of this requirement. Training plans should provide appropriate references to these procedures.



#### 2.13.2 Aptitude/Assessment testing

The Organisation should ensure that candidates for basic training undergo appropriate aptitude/assessment testing prior to acceptance and/or certification in order to ensure the applicant's suitability for serving as a VTS Operator.

#### 2.13.3 Acceptance verification

The Organisation should ensure that student candidates fulfil prerequisite requirements detailed in the applicable training plan. The organisation should confirm the identity of student candidates and verify suitable evidence of prerequisite qualifications prior to commencement of training.

In the event that prerequisite requirements cannot be verified prior to commencement of training, the organisation should take special note and ensure that the student training is not considered completed until prerequisite requirements have been verified.

#### 2.13.4 Examinations and competence

The Organisation should ensure that student candidates adequately demonstrate all applicable knowledge and competence requirements prior to being considered as having successfully completed the training course.

Students should be required to demonstrate adequate knowledge and competence in accordance with requirements of the training plan in order to be appropriately qualified.

The Organisation should establish and maintain documented procedures for the development and administration of examinations and tests for competence. As a minimum, examinations and criteria for evaluation of competence shall include applicable requirements of V-103, and of the Competent Authority.

Responsibility and authority for evaluation of student knowledge or competence should be defined.

#### 2.13.5 Satisfactory completion

The Organisation should maintain records of examinations of student knowledge and competence in accordance with the requirements of the competent authority. (see 2.16)

#### 2.13.6 Student progress

The Organisation shall establish and maintain documented procedures for identifying and recording student progress (see 2.13.5) from application through completion of training. Records of student progress shall be maintained. (see 2.16)

#### 2.14 Certification and endorsement

Training organisations should establish and maintain documented procedures for informing the Competent Authority of the successful completion of students training.

The Organisation should establish and maintain documented procedures for awarding VTS Operator Certificates and/or VTS Supervisor endorsements. Details of VTS Operator Certificates, VTS Supervisor endorsements and job specific endorsements should be entered into the student's VTS Certification Log.

#### 2.15 Control of student learning deficiencies

Responsibility and authority for evaluation of student knowledge and competence deficiencies should be defined. Deficiencies in regard to knowledge or competence should be reviewed in accordance with documented procedures. Where appropriate, students should be:

- a) retrained and re-examined in the specific area where deficiencies are noted;
- b) failed and required to repeat the training course.
- c) recommended to cease training.

#### 2.16 Control of TMS records

The Organisation should establish and maintain documented procedures for the identification, collection, indexing, access, filing, storage, maintenance and disposition of TMS records in accordance with the competent authority or their representative.

TMS records should be maintained in order to demonstrate:

- a) students' satisfactory completion of training and applicable competence requirements; and
- b) effective functioning of the TMS.

TMS records should be legible and stored in such a manner to preclude damage.

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