Document Revisions

***AISM***Association Internationale de Signalisation Maritime ***IALA***

International Association of Marine Aids to Navigation and Lighthouse Authorities

10 rue des Gaudines, 78100

**Saint Germain en Laye, France**

**Telephone: +33 1 34 51 70 0**1 Fax: +33 1 34 51 82 05

e-mail: [contact@iala-aism.org](mailto:contact@iala-aism.org) Internet: [www.iala-aism.org](http://www.iala-aism.org)

IALA Model Course

**V-103/5**

**On**

**Vessel Traffic Services**

**Revalidation Training**

**Edition 1**

**April 2015**

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** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Table of Contents

Index of Tables

Foreword

The International Association of Marine Aids to Navigation and Lighthouse Authorities has been associated with Vessel Traffic Services since 1955 and recognises the importance of human resources to the development of efficient Vessel Traffic Services worldwide.

Taking into account the International Convention on Standards of Training, Certification and Watchkeeping of Seafarers, 1978, as amended in 1995 (STCW Convention), the Seafarer’s Training, Certification and Watchkeeping Code (STCW Code) and STCW 95 Resolution 10, IALA has adopted Recommendation V-103 on Standards of Training and Certification of VTS personnel.

The model training courses developed, or being developed, by IALA for VTS personnel are:

* Model Course V-103/1 - VTS Operator Training
* Model Course V-103/2 - VTS Supervisor Training
* Model Course V-103/3 - VTS On-the-Job Training
* Model Course V-103/4 - VTS On-the-Job Training Instructor
* Model Course V-103/5 - VTS Certification Log Revalidation Training

These model courses are intended to provide national members, accredited training organisations and other appropriate authorities charged with the provision of vessel traffic services with specific guidance on the training of VTS Operators and VTS Supervisors. They may be used by maritime training organisations, and assistance in implementing any course may be obtained through IALA at the following address:

The Secretary General,

IALA, Tel: +33 34 51 70 01

10 rue des Gaudines, Fax +33 34 51 82 05

78100 Saint Germain en Laye e-mail: [contact@iala-aism.org](mailto:contact@iala-aism.org)

France internet [www.iala-aism.org](http://www.iala-aism.org)

# INTRODUCTION

## Purpose of the Model Course

This Model Course is intended to provide guidance on the Revalidation Process of VTS Personnel to Competent Authorities responsible for the provision of Vessel Traffic Services.

IMO Resolution A.857(20) states that once suitably qualified and trained employees are performing on the job, their performance must be observed and monitored to ensure that it continues to meet the established standards.   
  
The generic term, Revalidation Process, in this document is used to describe the different steps in the process of the revalidation of VTS Certification Logs. The Revalidation Process ensures that holders of VTS Certification Logs maintain a satisfactory level of operational performance in order to retain and increase their competency. In turn, this will assist in ensuring the safety and efficiency of navigation in a designated VTS area.

The Revalidation Process will, in general, be finalised with revalidation of VTS Certification Log.

To ensure the validity of the VTS Certification Log, the Competent Authority should implement a process of Revalidation Training. Revalidation Training consists of periodic Recurrent Training which may be supplemented by Adaptation Training and/or Updating Training as deemed necessary. Each type of training should be involve a relevant process of assessment.

Competent Authorities are encouraged to adopt this Model Course as part of the basis for mandatory training in a manner consistent with their domestic legal framework.

## Use of the Model Course

IALA Recommendation V-103 on the Standards for Training and Certification of VTS Personnel recommends that an assessment of the performance of each member of VTS Personnel should be carried out by a VTS Supervisor/Manager at regular intervals, preferably annually, to ensure that the standards set by the Competent Authority for VTS qualifications are continuing to be met.

As a means to complement this assessment, and to ensure the continuous professional development of VTS personnel, Revalidation training should be undertaken as necessary to ensure that holders of VTS Certification Logs maintain a satisfactory level of operational performance.

Revalidation training consists of three separate processes:

**Recurrent training** should be carried out at regular intervals and is part of a structured training programme and continual professional development.

**Adaptation training** is carried out whenever significant changes have been made concerning equipment, regulations, operational procedures etc. which may affect the performance of VTS personnel, or when otherwise deemed necessary.

**Updating training** is custom made following a gap analysis indicating that member(s) of VTS Personnel need additional training. Updating training may be required as a result of a break in service**,** unsatisfactory operational performance or other circumstances influencing the required level of competence.

VTS Certification Log

Regular Assessment

PART B - DELIVERY OF THE MODEL COURSE

Revalidation of VTS Certification Log

Recurrent Training

Adaptation Training

Updating Training

# Introduction

PART C - COURSE FRAMEWORK

# Introduction

# RECURRENT TRAINING

* 1. **Recurrent training**
     1. Scope (what)

Recurrent training is conducted to ensure VTS personnel maintain currency of their certificate log. The training is carried out at regular intervals as a part of a routine training programme and is hence mandatory. In order to ensure the currency of VTS Personnel the content of the training should be linked to a quality management system or a quality safety system. The content of the training courses could be generic, local or as deemed necessary.

* + 1. Objective (why)

Recurrent training ensures

* a satisfactory level of operational performance,
* maintenance of the currency of qualifications,
* the continuous professional development of VTS personnel,
  + 1. Training programme

VTS Authorities are recommended to develop a Recurrent training programme which covers the core competencies required to enable VTS personnel to maintain currency to perform their operational duties as directed by the VTS authority.

Recurrent training can only be conducted for the area/OJT the VTS operator is qualified for.

Undergoing recurrent training solely is not sufficient to maintain qualification? There should be a minimum of time spent at the VTS centre.

The Recurrent training programme should include, but not be limited to, the competencies stated in the Course outline. VTS Authorities should develop the broad subject headings provided in Course Outline to meet their specific local needs. VTS Authorities may expand and add subject headings as appropriate to meet their needs. Additionally VTS Authorities should take account of the previous experiences of VTS personnel when formatting a Recurrent training programme to avoid unnecessary repetition.

The Recurrent training programme should consist of clearly stated training plans for each subject area providing:

* Clear learning objectives/goals;
* Relate V-103/1, V-103/2 and V-103/3 competencies to local operations;
* Specific assessment points to verify and ascertain competence in the subject area.

The Recurrent training programme should be structured so that all elements of the plan are:

**S** - specific, significant, stretching;

**M** - measurable, meaningful, motivational;

**A** - agreed upon, attainable, achievable, acceptable, action-oriented;

**R** - realistic, relevant, reasonable, rewarding, results-oriented;

**T** - time-based, timely, tangible, traceable.

* + 1. Entry Standard

Minimum recommended entry standards for Recurrent training are:

* Successful completion of VTS Operator training as laid out in Model Course V-103/1, V-103/2 and V-103/3 and
* fully qualified as VTS Personnel and possessing valid VTS certification log

Recurrent training is only provided to VTS personnel that have a valid certification log and are fully qualified. Recurrent training is not intended to replace training as laid out in model course V103/1, V-103/2, V-103/3, updating training or adaption training but is a mean of maintaining currency, reinforcing previous training, and providing for continuous professional development.

* + 1. Requirements for revalidation in the VTS Certification Log

All VTS personnel for gaining revalidation in the VTS Certification Log should satisfy the requirements of the Competent Authority by successfully completing the assignments and tasks set out in the recurrent training developed by the VTS Authority.

The form and timing of performance appraisal for the issue of an endorsement in the VTS Certification Log is a matter of the Competent Authority concerned.

An adequate period of time should be allowed at the end of the course for revision and review of the course content. That period, and the time occupied by performance appraisals, should be additional to the times shown in the lesson plan.

* + 1. Course intake – limitations

In case of classroom training class sizes may be limited at the discretion of the Competent Authority in order to allow the instructor to give adequate attention to individual participants. In general it is recommended that a maximum of 12-14 students be the upper limit that a single instructor can be expected to train satisfactory to the level of competence involved. Larger numbers may be admitted if extra staff and tutorial periods are provided to deal with participants on an individual basis.

During practical sessions and group activities there may be additional restraints on class size. In particular, where the use of a simulator or similar teaching aid is involved, it is recommended that no more than two students be trained simultaneously on any individual piece of equipment.

* + 1. Staff requirements

Competent Authorities should ensure that instructors conducting recurrent training are appropriately qualified and experienced for the particular types and levels of training and corresponding assessment of competence.

* A valid VTS operator Certificate is required …
  + 1. Frequency (when)

IALA recommendation V-103 ‘Recommendation on Standards for Training and Certification of VTS Personnel’ acknowledges the need for assessments of the performance of the VTS personnel at regular intervals. This to ensure that the standards set by the Competent Authority for VTS personnel qualifications are continuing to be met. The Competent Authority should determine a recurrent training programme with fixed intervals for the assessments, preferably annually and not exceeding a period of three/five years.

* + 1. Delivery (how)

The content of the recurrent training is determined by the VTS Authority and should be part of a fixed training programme. The basis for this programme could be either generic, local or what is deemed necessary.

To deliver a training course effectively, consideration should be given to the availability and the use of:

* Qualified instructors
* Support staff
* Classrooms, and other spaces
* Equipment, including simulators
* Textbooks and technical papers
* Other reference material

Recurrent training should, wherever practicable, include the use of simulation. However, where simulation is not practicable, the exercises should be designed to be fully representative of appropriate situations that occur in a VTS environment.

Examples of recurrent training topics:

* Traffic management
* Human factor management
* Risk analysis
* Training on incidents
* Bridge team familiarisation
* Local area familiarisation (on board)
* Communication
  + 1. Assessment

It is recommended that VTS personnel are assessed by qualified personnel. They should assure that the VTS personnel meets the level of performance determined by the VTS Authority at the end of the recurrent training. VTS personnel not meeting these standards should undergo the programme determined by the VTS authority. If performances are below a satisfactory level, as determined by the VTS Authority, a gap analysis may be conducted that leads to updating training.  
The complete results of recurrent training should be recorded in accordance with the recommendation in V-103.

4.1.6 Process evaluation

# ADAPTATION TRAINING

* + 1. Scope (what)

An Adaptation Training in the Revalidation Process should take place when there were/will be significant changes in the environment that take effect in VTS Personnel performance. This could happen for instance when there are changes in equipment, regulations or procedures, etc.

Because of the fact that VTS Personnel has a VTS Certification based on the IALA Model Courses V-103 1 to 3 it is assumed, that there could be made changes in all training parts / syllables of those Model Courses.

* + 1. Objective (why)

After following an Adaptation Training VTS Personnel should have a sustainable high level of VTS operational competency to fulfil their VTS job (again) in a professional way. The training should take place in accordance with the end level of IALA Model Course V-103/3.

A gap analyses should be undertaken to identify the impact of the changes in order to develop specific training objectives.

* + 1. Presentation (where)

The Adaptation Training may be specific to the VTS Centre and can be delivered local in the VTS Centre, at Accredited Training Organization(s) and/or other venues as well.

* + 1. Format of the Adaptation Training (content)

The content of the Adaptation Training should be developed to meet the significant changes in the environment, such as equipment, regulations or procedures, etc.

The specific format of the Adaptation Training can be derived from the training objectives.

The Adaptation Training may consist of a range of means of delivery to suit the specific needs of the Competent/VTS Authority and/or the VTS Centre.

The means of delivery may consist of, but not be limited to:

* + presentation;
  + demonstration
  + hands on training or equipment training;
  + simulation training;
  + case study;
  + visit to stakeholders;
  + any form of On-the-Job training.

The above mentioned means of delivery should be based on structured lesson/training plans. These plans should contain references to textbooks, manuals, procedures, technical documents, teaching materials, teaching aids and student materials that will be required during the delivery of the course/training.

* + 1. Frequency / Timing (when)

An Adaptation Training should takes place as needed and as deemed necessary by the Competent /VTS Authority and could not be on a regular base.

Every time there is a change in equipment, regulations or procedures, etc. that takes effect in VTS Personnel performance an Adaptation Training should be undertaken.

It is recommended that the Adaptation Training should take place, if possible, before the changes effects the operations.

* + 1. Duration (how long)

It is difficult to recommend a fixed duration for the Adaptation Training because there are several variables that will affect the time needed for VTS Personnel to become familiar with the changes.

In determining the duration, the Competent/VTS Authority should consider the complexity, number and content of the changes as well as the training objectives.

Other variables to be considered are e.g.:

* the resources available to deliver the training with reference to both human and physical resources and
* the number of VTS Personnel undergoing course/training.
  + 1. Implementation

For the course/training to run smoothly and effectively, considerable attention must be paid to:

• The need for the Competent/VTS Authority to create course/training syllabus. These are intended to provide structure for and means of, monitoring this course/training;

• The availability and use of qualified internal and external teaching/training personnel;

• The availability and use of support staff;

• The need for trainees to have access to equipment, remote sites, textbooks, manuals, procedures, technical documents, teaching materials, teaching aids and student materials;

• The need for trainees to have full and ample opportunity to carry out and practice changed procedures under supervision.

* + 1. Validation (for all 3 training parts)

The information contained in this document has been validated by a group of technical advisers, consultants and experts on training of VTS Personnel for use in the R-A-U Training so that the standards may be as consistent as possible.

The technical advisers were drawn from the IALA VTS Committee, training institutions of IALA National Members and experienced VTS Operators/VTS Supervisors/VTS Managers.

Validation in the context of this document means that the group has found no grounds to objects its contents.

* + 1. Training staff requirements (who)

When using teaching persons outside the VTS organization a didactical background is preferable.

All TTI’s (Teachers, Trainers, Instructors) inside the VTS Organization or Accredited Training Organization should be appropriately qualified for the type and content of course/training required.

* + 1. Course intake - limitations (how many)

It is difficult to recommend a fixed course intake for the Adaptation Training because there are several variables that will affect the number of trainees, as e.g.:

* the limit to take trainees out of the daily operations;
* the type of training;
* resources needed for delivering the training.

Should there be a requirement for classroom work during Adaptation training, class sizes may be limited at the discretion of the VTS Authority in order to allow the instructor to give adequate attention to individual trainees. In general, it is recommended that a maximum of 12 - 14 students be the upper limit that a single instructor can be expected to train satisfactorily. Should there be a hands-on equipment training then the upper limit can be smaller.

* + 1. Delivery / Organisation (how) (for all 3 training parts)

The training programme should consist of clearly stated training plans for the subject area providing:

* Learning objectives and goals;
* Relation to the module(s) in Model Courses V-103 1 to 3 and
* Assessment or evaluation approval after following Training in this Revalidation Process.

Above all the training programme should be structured so that all elements of the plan are:

**S** - specific, significant, stretching;

**M** - measurable, meaningful, motivational;

**A** - agreed upon, attainable, achievable, acceptable, action-oriented;

**R** - realistic, relevant, reasonable, rewarding, results-oriented;

**T** - time-based, timely, tangible, traceable.

The delivery should be in the form of two training aspects: a theoretical part and/or a practical part depending on the type of changes.

All training should be:

* structured in accordance with job performance, standard operating procedures and elements specific to the VTS centre concerned;
* if necessary presented in a realistic, job-centred atmosphere and,
* conducted, monitored, evaluated and supported by persons qualified in accordance with IALA Guideline 1103: Train the Trainer.

The Training in this Revalidation Process should include, but not necessarily be limited to, the subjects in the module(s) in Model Courses V-103 1 and 3, such as:

* Language;
* Traffic Management;
* Equipment;
* Nautical Knowledge;
* Communication and Co-ordination;
* VHF Radio;
* Personal Attributes and
* Emergency Situations.
  + 1. Assessment (this part may affect also other training)

When Training in the Revalidation Process has affect in VTS Personnel performance the Competent/VTS Authority should determine the need of an assessment as described in IALA Model Course V103/3: On-the-Job Training.

Competent/VTS Authority should determine which records of Training in the Revalidation Process should be included in the VTS Certification Log.

After following a Training in the Revalidation Process VTS Personnel should be awarded with a Certificate of Attendance.

The Competent/VTS Authority and Accredited Training Organisations should keep record of all activities undertaken in Recurrent, Adaptation and Updating Training.

The Competent/VTS Authority and Accredited Training Organisations should have procedures in place (from feedback up to QMS/TMS) to ensure that the training fulfil defined quality standards.

When using QMS and TMS the Competent/VTS Authority and Accredited Training Organisations should follow IALA Guideline 1014 - the Accreditation and Approval Process for VTS Training.

# UPDATING TRAINING

* + 1. Scope (what)

Updating training occurs when VTS Personnel need additional training due to break(s) in service for a certain period, inadequate operational performance and other circumstances as determined by the Competent/ VTS Authority.

Competent/VTS Authority should determine time limits for break(s) in service when Updating Training is mandatory.

In these cases a gap analysis can indicate the need for and provide the content for an Updating Training.

* + 1. Objective (why)

Updating Training ensures that VTS Personnel maintain a satisfactory level of operational performance.

Updating Training guarantees that VTS Personnel qualifications, obtained as per IALA Model Courses V-103 1 to 3 requirements, are maintained during the professional career.

Updating Training also helps VTS Personnel to maintain sufficient competency to safely and efficiently perform their duties.

Updating training concentrates on operational performance especially when:

- there has been break(s) in service,

- the operational performance has been on inadequate level or

- the operational performance standards have not been met in periodical assessment.

* + 1. Frequency (when)

An Updating Training should take place as and when needed or as deemed necessary by the Competent/VTS Authority for individual VTS Personnel and could not be on a regular base.

* + 1. Delivery (how)

The content of the updating training is determined by the VTS Authority and should be part of a fixed training programme. The basis for this programme could be either generic, local or what is deemed necessary. The VTS Authority should determine the standards that are to be met and should implement a programme for VTS operators failing to meet these standards.

To deliver a training effectively, consideration should be given to the availability and the use of:

* Qualified instructors
* Support staff
* Classrooms, and other spaces
* Equipment, including simulators
* Textbooks and technical papers
* Other reference material

Updating training should, wherever practicable, include the use of simulation. However, where simulation is not practicable, the exercises should be designed to be fully representative of appropriate situations that occur in a VTS environment. Examples of updating training:

* Traffic management
* Human factor management
* Training on incidents
* Communication
* IALA updates
  + 1. Assessment

It is recommended that updating training is being assessed and evaluated by qualified personnel. This should assure that the VTS operator meets the level of performance determined by the VTS Authority as an outcome of the updating training. VTS Authority may also determine how long training period should be sufficient for a VTS operator to meet the required standards, and what are the consequences if standards are still not met after the updating training is completed in full extent.

VTS Authority should determine which records of updating training should be included in the VTS certification log.

1. **References**

The following primary references have been used in the production of this M:

* IALA Dictionary;
* IALA Guideline 1018;
* IALA Guideline 1070;
* IALA Model Course V103/3;
* IALA Recommendation V-125;
* IALA Recommendation V-127;
* IALA Recommendation V-128;
* IALA Recommendation V-103;
* IALA VTS Manual 2012;
* IMO Resolution MSC.302 (87).

Part D - GUIDELINES FOR INSTRUCTORS

# Introduction

Part E - COURSE MODULES