

**IALA COUNCIL  
60<sup>th</sup> Session**

**May 26-29, 2015  
Kuala Lumpur  
Malaysia**

**Agenda item 9 – IALA TECHNICAL ACTIVITIES**

**9.3    ENG**

**9.3.3   Draft revised IALA Recommendation E-141 on Standards for Training and Certification  
of AtoN Personnel**

**Note by the Secretariat**

**Background**

At its 1<sup>st</sup> meeting in November 2014 the ENG Committee completed the revision of the IALA Recommendation E-141. It was then forwarded to the ARM Committee and this Committee's comments are taken into account in the attached document.

**Action requested from Council:**

The Council is invited to approve the IALA Recommendation E-141 as revised.

# **IALA Recommendation E-141**

**on**

## **Standards for Training and Certification of AtoN Personnel**

**Edition 3**

**May 2015**

1<sup>st</sup> edition: April 2012



10, rue des Gaudines  
78100 Saint Germain en Laye, France  
Telephone: +33 1 34 51 70 01 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)

## 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  |
|---------------|------------------------|---|
| April 2012    | Entire document        | Reference to Level 1+ training for senior managers added.<br>Removal of detailed training syllabus for Level 2 technician removed. This detail is now included in the model course overview for Level 2 technician training.  |
| November 2014 | Page 5; 8              | Minor amendments to definitions of who might deliver training with the inclusion of the IALA World-Wide Academy.<br>Deletion of non-applicable abbreviations and revised definitions of “manager” and “technician” as footnotes.<br>Amendment of details on certificates for Level 1+ and Level 1 courses and deletion of paragraph on risk management courses<br>Deletion of “Grandfather Clause” and insertion of recognition of long-standing training arrangements<br>Addition of introduction to e-navigation course |
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## **IALA Recommendation on Standards for Training and Certification of AtoN Personnel (Recommendation E-141)**

### **THE COUNCIL:**

**RECALLING** the function of IALA with respect to Safety of Navigation, the efficiency of maritime transport and the protection of the environment;

**RECOGNISING** that training in all aspects of aids to navigation (AtoN) delivery – from inception to installation, to maintenance and life-cycle planning – is critical to the consistent provision of the AtoN service;

**RECOGNISING ALSO** the work done by the Association on the development of training for AtoN managers, technicians and VTS personnel;

**NOTING the** Decision taken at the 52<sup>nd</sup> IALA Council to develop the IALA World Wide Academy (The Academy) as the vehicle by which IALA delivers training and capacity building which has subsequently issued five Model Courses on Level 1 Manager Training; Model Course E-141/2 on Level 1+ Senior Manager Training and 33 Model Courses on Technician Training;

**NOTING ALSO** that the SOLAS Convention, Chapter 5, Regulation 13, paragraph 2, states that ‘in order to obtain the greatest possible uniformity in AtoN, Contracting Governments undertake to take into account the international recommendations and guidelines when establishing AtoN’ and that should include recommendations on training and qualification of the personnel in charge;

**CONSIDERING** the proposals by the AtoN Engineering and Sustainability Committee

**ADOPTS** the revised Standards for Training and Certification of AtoN Personnel set out in the ANNEX to this recommendation; and,

**RECOMMENDS** that National Members and other appropriate Authorities providing marine aids to navigation services use the standards given in the annex and their related model courses as the basis for the training and certification of AtoN personnel.



## **Annex**

# **IALA Recommendation on Standards for Training and Certification of AtoN Personnel**

## **1 INTRODUCTION**

### **1.1 General**

The international character of shipping operations generates the need for a common approach and universally agreed standards for AtoN. According to the SOLAS Convention Chapter 5, Regulation 13, Paragraph 2, 'In order to obtain the greatest possible uniformity in aids to navigation, Contracting Governments undertake to take into account the international recommendations and guidelines when establishing such aids.' Reference is made to IALA Recommendations and Guidelines.

The successful delivery of AtoN services depends upon competent and experienced personnel to implement and maintain such aids. It means that IALA should not only define international standards for the AtoN themselves, but also for the personnel in charge of their implementation and their maintenance.

The recruitment, selection and training of suitable personnel are a pre-requisite to the provision of professionally qualified personnel capable of contributing to safe and efficient AtoN operations. This Recommendation sets out the training requirements and certification standards for AtoN personnel. These should be implemented by National Members and other appropriate Authorities to ensure that uniform standards of procedures, practices and professional standards are applied world-wide.

### **1.2 Definitions and Clarifications**

For the purpose of this Recommendation the following definitions and clarifications have been used:

**Accredited Training Organisation** is an organisation accredited by the Competent Authority for the purpose of carrying out training of AtoN or VTS personnel.

**Approved training programme** is a course of study comprising basic or advancement training conforming to a model course approved by IALA.

**AtoN Personnel** are persons trained in AtoN matters and holding appropriate qualifications issued by, or on behalf of, a Government or a Competent Authority. Three levels of skills, knowledge and competence of AtoN Personnel are set out in this Recommendation. The three levels are described as Level 1+ for senior managers; Level 1 for managerial functions and Level 2 for technical functions respectively.

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

**Competent Authority** is an authority made responsible, in whole or in part, by the Government for Aids to Navigation.

**On-the-Job training** is training and familiarization at the AtoN workshop at which the person will be employed. It includes training on the particular AtoN services provided, the facilities and equipment used as well as the local geography and appropriate regulations and procedures.

**Training Level 1+** is training given by the IALA World-Wide Academy to the standards described in Model Course E-141/2 for senior managers responsible for AtoN service provision and their counterparts within the Competent Authority.

**Training Level 1** is training given at an Accredited Training Organisation or by the IALA World-Wide Academy to the standards described in Model course E-141/1 for personnel having managerial functions.

**Training Level 2** is training given at an Accredited Training Organisation to the standards described in Model Course IALA WWA.L2.0 for personnel having technical functions<sup>1</sup>.

### **1.3 References**

#### **1.3.1 IMO Documents**

Chapter V, Regulation 13 (Aids to Navigation) of the Safety of Life at Sea Convention, 1974, as amended.

#### **1.3.2 IALA Documents**

NAVGUIDE

IALA Recommendations and Guidelines

### **1.4 Abbreviations**

AtoN      Aid(s) to Navigation

IALA      International Association of Marine Aids to Navigation and Lighthouse Authorities

IMO      International Maritime Organisation

## **2 GENERAL PROVISIONS**

### **2.1 Responsibilities**

In planning, establishing and implementing AtoN, the Government or the Competent Authority should:

- 1      ensure that the AtoN Authority is provided with sufficient staff, appropriately qualified, suitably trained and capable of performing the tasks required, taking into consideration the type of AtoN and the level of services to be provided;
- 2      establish appropriate qualifications and training requirements for the AtoN staff, taking into consideration the type of AtoN and the level of services to be provided;
- 3      ensure that the standards set by the Competent Authority for levels of service and staff qualifications are met.

### **2.2 Principles**

In order to discharge the duties required when implementing and maintaining AtoN, all personnel involved should obtain an AtoN qualification before being considered competent to intervene in AtoN matters<sup>2</sup>.

A person should therefore only be considered capable of carrying out the duties regarding AtoN activity when in possession of:

- 1      A Level 1 Certificate for an AtoN Manager, including all modules for that area of responsibility<sup>3</sup>;
- 2      A Level 2 Certificate for AtoN Technician with only the modules necessary for the job function<sup>4</sup>.

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<sup>1</sup> The Reference is in the IALA World-Wide Academy format for model courses. L2 refers to a Level 2 Technician

<sup>2</sup> Executives in Ministries responsible for aids to navigation services and senior management in aids to navigation service providers are encouraged to attend an IALA Level 1+ awareness seminar.

<sup>3</sup> The term “manager” includes both maritime professionals and engineers

<sup>4</sup> The term “technician” includes semi-skilled workers

## **2.3 Objectives**

The objectives of this Recommendation are to:

1. Provide a sound basis for establishing a training programme on the specific knowledge and skill requirements necessary for implementing and maintaining AtoN;
2. Provide AtoN Authorities with guidelines on their international obligations;
3. Provide AtoN Authorities with guidelines for recruiting potential AtoN staff;
4. Ensure that certificated personnel are qualified to intervene on AtoN;
5. Assess AtoN staff ability to perform to established and recognized standards;
6. Support, as far as is practicable, the consistent application of AtoN standards world-wide;
7. Foster professionalism and pride in AtoN Personnel;
8. Provide a basis for a structured progression for AtoN Personnel; and,
9. Provide the basis for model courses for AtoN Personnel.

## **2.4 Certificates**

An appropriate Certificate of Attendance, Level 1+, should be awarded to participants who have attended an IALA WWA awareness seminar based on Model Course E-141/2.

An AtoN Certificate, Level 1, should be awarded upon successful completion of the necessary IALA approved training programme delivered by an accredited training organisation or by the IALA World-Wide Academy.

An AtoN Certificate, Level 2, for any specific module, should be awarded upon successful completion of that IALA approved training module.

Any technician or worker intervening on behalf of a contracting supplier, and under its responsibility, should be exempted from holding a Level 2 AtoN Certificate, when intervening on equipment provided or maintained by that supplier.

## **2.5 Recognition of Certificates**

Where suitable reciprocal arrangements apply, the Competent Authority of one country should recognize an AtoN Certificate issued by the Competent Authority of another country provided that the:

- certificate has been issued in accordance with this Recommendation; and,
- Competent Authorities are satisfied with the training arrangements of the other country concerned.



### **3 AtoN PERSONNEL**

#### **3.1 Level 1+ – Senior Manager**

Competent Authorities and AtoN service providers require executives and senior managers within their organisations who understand fully the obligations placed on them by international conventions.

#### **3.2 Level 1 – Manager**

An AtoN organization requires the appointment of managers to administer, organize and maintain the service that would be provided at a level in accordance with the IALA standards. Depending on the number of AtoN and the length of coasts, there may be one or several managers at national level, regional level and/or local level.

Internationally agreed qualifications for AtoN Managers are the key to the establishment of common training standards. The qualifications to be awarded after successful completion of an accredited training programme based on Model Course E-141/1 should be in the form of an 'AtoN Level 1 Certificate'. Previous qualifications and experience may be taken into consideration when assessing the training requirements for prospective AtoN Managers.

#### **3.3 Level 2 – Technician**

Control and intervention on any AtoN should be done by a qualified technician in accordance with IALA standards. The technician should be qualified in accordance with the type of AtoN and the nature of control or intervention concerned.

Internationally agreed qualifications for an AtoN Technician are the key to the establishment of common training standards. The qualifications to be awarded after successful completion of an accredited training module based on specified elements shown in Model Course IALA WWA.L2.0 should be in the form of an AtoN Level 2 Certificate for xxx (name of the training module). Previous qualifications and experience may be taken into consideration when assessing the training requirements for such a module.

The contents of all Model courses take into account IALA Recommendations and Guidelines, in particular the NAVGUIDE Manual. Those describing technical functions for Level 2 could also be used for training Level 1, as necessary.

### **4 QUALIFICATIONS AND CERTIFICATIONS**

#### **4.1 Qualification**

The award of AtoN qualifications should be based on the principle that satisfactory results are obtained during the basic training course.

The qualification for personnel to act as an AtoN Manager is the possession of a current Level 1 Certificate<sup>5</sup>.

Qualification for personnel to act as an AtoN Technician is the possession of current Level 2 Certificate(s) for the module(s) in relation with the actual job or activity.

#### **4.2 Certification**

An AtoN Level 1 Certificate should be awarded to candidates on completion of basic training courses.

The certificate should include the:

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<sup>5</sup> Participants attending Level 1+ Model Courses are generally only issued with Certificates of Attendance

- 1 Candidate's full name;
- 2 Country in which it was awarded;
- 3 Signature of an authorised member of the Competent Authority;
- 4 Date of award; and,
- 5 Serial number of the certificate.

The Certificate should be in a format similar to the example given in APPENDIX 1

An AtoN Level 2 Module Certificate should be awarded to candidates on completion of basic training.

The certificate should include the:

- 1 Candidate's full name.
- 2 Country in which it was awarded.
- 3 Signature of an authorised member of the Competent Authority.
- 4 Date of award.

The Certificate should be in a format similar to the example given in APPENDIX 2.

#### **4.3 Validity**

An AtoN qualification should be valid unless there is a break in carrying out the duties for a period of five years or above. In such case, a revalidation is required to ensure the holder of an AtoN qualification continues to maintain professional competence. Revalidation method should be made by a board convened by the AtoN Competent Authority.

## **5 TRAINING**

### **5.1 Introduction**

IALA recognises that a number of well-established National Members and other appropriate Authorities have long-standing, comprehensive training arrangements in place for the assessment, specification and delivery of AtoN requirements. Many of the model courses set out in this Recommendation were prepared with their assistance. It is recommended that those National Members and other appropriate Authorities satisfy themselves that to the extent appropriate their training syllabi and procedures meet or exceed those standards set out in this Recommendation and its associated model courses.

IALA further recognises that many National Members and other appropriate Authorities make a clear distinction between assessment and specification of AtoN requirements and the delivery of those requirements and that their training arrangements will reflect these two distinct areas accordingly.

### **5.2 Training Guidelines**

Training times should be dependent on the experience, if any, of trainees. Training to work as a member of a team should normally be part of the syllabus.

All training and assessment of AtoN Personnel should be:

- 1 Structured in accordance with written programmes, including such methods and media of delivery, procedures, and course material as are necessary to achieve the prescribed standard of competence. and

- 2 Conducted, monitored, evaluated and supported by persons qualified. Competent Authorities should ensure that instructors and assessors are appropriately qualified and experienced for the particular training and assessment of competence for which they are given responsibility. Instructors should hold suitable professional and academic qualifications.

All training courses should be based on the model courses associated with this Recommendation and be quality approved and accredited by the Competent Authority concerned.

Basic training for Level 1 should be carried out by an Accredited Training Organisation or the IALA World-Wide Academy.

Competent Authorities should ensure that the aims and objectives of training are defined within an overall training programme, and that specific training objectives and tasks are selected so as to relate as closely as possible to AtoN tasks and practices.

## **5.2 AtoN Level 1 Certificate**

Trainees selected for undertaking the AtoN Level 1 Certificate should have a background in engineering or hold a Masters' Certificate.

The award of an AtoN Level 1 Certificate and endorsement to act as an AtoN Manager should be achieved by successfully undertaking the complete training syllabus set out in Model course E-141/1.

In addition, for accomplishing specific tasks, the trainee should go through specific courses such as:

- IALA Risk Management Tool based on model course IALA WWA.L1.3:
  - PAWSA;
  - IWRAP Mk2.
  - Simulation
- Introduction to e-Navigation based on model course IALA WWA.L1.4:
- Others to be defined.

## **5.3 AtoN Level 2 Module Certificates**

The award of AtoN Level 2 Module Certificates and endorsement to act as an AtoN Technician should be achieved by successfully undertaking training for some or all of the modules considered based on the syllabus set out in IALA WWA.L2.0.

The training should comprise a theoretical section based on the model courses listed in IALA WWA.L2.0 and subsequent 'on-the-job' training of a duration agreed by the AtoN Competent Authority.

## APPENDIX 1 EXAMPLE OF AN AtoN LEVEL 1 CERTIFICATE

# AtoN Level 1 Certificate

*This is to certify that*



*has successfully completed the*

*BASIC TRAINING*

*in accordance with the IALA approved training programme*

*required for an AtoN Manager*

Issued on behalf of: (name of responsible Department)

Certificate No:

(Country)      Awarded at      (Name of training organisation)

Signature

Date

This Certificate is awarded in accordance with  
IALA Recommendation E-141 and Guideline E-141/1

## APPENDIX 2 EXAMPLE OF AN AtoN LEVEL 2 CERTIFICATE

# AtoN Level 2 Certificate

*This is to certify that*



*has successfully completed the*

*BASIC TRAINING MODULE(S)*

*In accordance with the IALA approved programme*

*required for an AtoN Technician*

*to intervene on: ...*

Issued on behalf of: (name of responsible Department)

Certificate No:

(Country)

Signature

Date

This Certificate is awarded in accordance with  
IALA Recommendation E-141 and IALA WWA.L2....

## APPENDIX 3 EXAMPLE OF AN AtoN LEVEL 1 COMPLEMENTARY MODULE CERTIFICATE

# AtoN Level 1 Certificate

*This is to certify that*



*has successfully completed the*

*Complementary Module on:*

...

*in accordance with the IALA approved training programme*

*required for an AtoN Manager*

Issued on behalf of: (name of responsible Department)

Certificate No:

(Country) Awarded at (Name of training organisation)

Signature

Date

This Certificate is awarded in accordance with

IALA Recommendation E-141 and Guideline E-141/1