

**IALA GUIDELINES**

**on**

**THE ASPECTS OF THE TRAINING OF  
VTS PERSONNEL RELEVANT TO THE  
INTRODUCTION OF AUTOMATIC  
IDENTIFICATION SYSTEM**



**June 2003**

International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA)  
Association Internationale de Signalisation Maritime (AISM)  
20ter rue Schnapper – 78100 Saint Germain en Laye – France  
Tel: + 33 (0) 1 3451 7001 Fax: +33 (0) 1 3451 8205  
e-mail: [iala-aism@wanadoo.fr](mailto:iala-aism@wanadoo.fr) web: [www.iala-aism.org](http://www.iala-aism.org)



## Contents

1	Introduction .....	4
2	Reference Documents .....	4
3	Impact on the VTS Operator .....	4
4	Impact on Training of VTS Personnel.....	5
4.1	AIS and VTS Basic Operator Training Programmes .....	5
4.2	General Learning Outcomes .....	5

# **Guidelines on the aspects of the training of VTS personnel relevant to the introduction of AIS**

## **1 Introduction**

Automatic Identification System (AIS) has arrived in the maritime world. Functional, technical and test standards are in place. There are operating guidelines, regulations and legislation that describe and prescribe its use. Although Shipboard users and Vessel Traffic Service personnel are understood to be greeting the arrival of AIS with high expectations, there is also some anxiety as it is probable that AIS will have an impact on nearly all aspects of active marine transportation. To ensure that this impact is positive, Competent and VTS Authorities should consider means of easing the transition into AIS through thorough preparation and training of personnel.

AIS is unlikely to change significantly the VTS workplace. However, it can be expected to affect the presentation of information to operators and impact on their situational awareness, thus affecting their ability to maintain a traffic image.

## **2 Reference Documents**

- IMO A.917(22) (November 2001);
- IALA Recommendation V-103 and associated model courses;
- IALA Guidelines (AIS as a VTS Tool December 2001; AIS Guidelines Vol 1, Part 1, edition 1.1 and AIS Guidelines Vol. 1, Part 2, edition 1.1 December 2002);
- EU Directive 2002/59 (June 2002);
- US Maritime Transport Security Act (Jan 2003);
- INDRIS – European Research Project.

## **3 Impact on the VTS Operator**

AIS will be a useful and versatile tool, and its impact on VTS personnel and operations promises to be positive. In particular, AIS will be able to provide additional, and more precise, information.

While AIS is unlikely to change the legal framework of the responsibilities of VTS personnel, there is no doubt that AIS will affect the working procedures and practices of a VTS Centre. However, until AIS is in common use aboard vessels and its full impact on VTS is known, the full extent of its effects are uncertain. In order to allay the anxiety induced by this uncertainty VTS Authorities should issue guidance on how to use and manipulate AIS information. As a minimum, the guidance should include, but not be limited to:

- Terms of reference that delineate the responsibilities of VTS Personnel the and restrictions imposed upon them;
- Differences and similarities of operations after AIS is introduced, indicating what will change and what will remain the same;
- Description of the coverage area of AIS in relation to the VTS area;
- Process for verification of AIS information;
- Process for reconciling conflicting or incomplete information on the traffic situation;

- Process for delivering information, traffic organization and navigation assistance services when AIS is in use; and
- Extent to which the improved capability provided by AIS is expected to affect the VTS.

In addition to being provided with this basic guidance, VTS personnel should be thoroughly trained in the applications and limitations of AIS. AIS may affect various aspects of the role of the VTS personnel, including stress/workload; communications.

## **4 Impact on Training of VTS Personnel**

Competent Authorities should consider the need to incorporate into initial, refresher and on-the-job training programmes, formal training in AIS for all VTS personnel. Curricula, equipment and scenarios should be designed or developed to make operators aware of AIS capabilities and limitations. Training instruments should be flexible to accommodate changes in AIS procedures that may occur as experience is gained with the technology.

### **4.1 AIS and VTS Basic Operator Training Programmes**

Wherever practicable, VTS Personnel should be instructed on AIS theory and its use prior to installation at a VTS Centre. The aspects of AIS as included in existing V-103 documentation forms a basis for the inclusion of AIS in a basic operator-training programme and as AIS technology becomes integrated into VTS operations, the training of AIS concepts should become an integral part of all VTS Training Programmes.

The use of simulation will aid in the competent use of AIS in a VTS centre, and should form an integral part of the overall training programme. For further information on the use of simulation see the IALA Guidelines for Designing and Implementing Simulation in VTS Training, June 2002.

### **4.2 General Learning Outcomes**

At a minimum, any AIS training programme should include:

- AIS legislation, regulations, guidelines and requirements;
- Basic AIS operating principles;
- The use of AIS from the shipboard perspective;
- Equipment capabilities and limitations;
- Operational limitations of AIS;
- Integration of AIS into the VTS operating environment;
- Any changes in the responsibility and liability of the VTS as a result of AIS;
- Contingency plans in the event of AIS failure;
- Scenarios and exercises to familiarize operators with the use of AIS.

Throughout training of VTS Personnel it should be stressed that AIS is primarily an additional sensor input to the VTS that can be expected to provide quality information and enhanced capability.

-----

