



IALA GUIDELINE

1101

AUDITING AND ASSESSING VTS

Edition 1.0

December 2013



DOCUMENT REVISION

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

Date	Page / Section Revised	Requirement for Revision



CONTENTS

1. INTRODUCTION	4
2. OVERVIEW	4
3. AIMS AND OBJECTIVES	4
4. RESPONSIBILITIES	5
4.1. Contracting Government / Competent Authority	5
4.2. VTS Authority	5
5. FRAMEWORK FOR AUDITING AND ASSESSING	5
5.1. Checklist for the Auditing and Assessing VTS	5
6. PROCEDURES FOR AUDITING AND ASSESSING VTS.....	6
7. ACRONYMS.....	7
ANNEX A AUDIT CHECKLIST FOR THE ASSESSMENT OF A VTS	8



1. INTRODUCTION

Vessel Traffic Services are recognised internationally as a navigational safety measure through the International Convention on the Safety of Life at Sea 74/78 (SOLAS). In particular, the provisions in SOLAS Chapter V (Safety of Navigation) Regulation 12 provides for Vessel Traffic Services and states, amongst other things, that:

- 'Vessel Traffic Services (VTS) contribute to safety of life at sea, safety and efficiency of navigation and protection of the marine environment, adjacent shore areas, work sites and offshore installations from possible adverse effects of maritime traffic.'
- 'Governments may establish VTS when, in their opinion, the volume of traffic or the degree of risk justifies such services'.

SOLAS also states that contracting Governments planning and implementing VTS shall, wherever possible, follow the guidelines developed by the IMO.

Recognising that the safety and efficiency of maritime traffic and the protection of the marine environment would be improved if vessel traffic services were established and operated in accordance with internationally approved guidelines the IMO Assembly adopted IMO Resolution A.857(20) Guidelines for Vessel Traffic Services. The Resolution describes the principles and general provisions for the operation of a VTS and participating vessels, in addition to the roles and responsibilities of contracting governments, competent authorities and VTS Authorities.

2. OVERVIEW

The establishment and on-going operation of a VTS is a considerable investment. To achieve the purposes for which it was implemented it needs to be effective and routinely evaluated to ensure that the operational objectives are being met, the technical and operational performance is acceptable and the issues identified and defined in determining the need for the VTS have been either alleviated or at least reduced to an acceptable level.

3. AIMS AND OBJECTIVES

The aim of this document is to provide guidance for competent authorities and VTS authorities to meet their obligations under SOLAS for the establishment and operation of VTS. In particular, it aims to provide guidance for auditing and assessing a VTS and the subsequent on-going assessment and evaluation to ensure:

- Conformity with international obligations;
- The technical performance of the VTS equipment is consistent with the objectives of the VTS and the types of service/s provided;
- The operational objectives are being met;
- The degree of risk identified in determining the need for the VTS have been either alleviated or at least reduced to an acceptable level.

Note:

This Guideline is intended to complement other IALA guidance, as amended, on the establishment and on-going operation of VTS. It is not intended to replicate the information and guidance in these documents or be prescriptive about auditing provisions / quality management systems. Rather, it provides a framework to assist authorities to meet their obligations for the establishment and operation of VTS in a consistent manner. Key IALA documentation associated with this Guideline may be found on the IALA web site www.iala-aism.org.

4. RESPONSIBILITIES

The responsibilities of the Contracting Governments / competent authorities and VTS authorities in planning, establishing and operating a VTS are described in IMO Resolution A.857(20) Guidelines for Vessel Traffic Services. Recognising that the relationship between the competent authority and the VTS authority may differ between countries the following guidance is provided for the respective responsibilities.

4.1. CONTRACTING GOVERNMENT / COMPETENT AUTHORITY

The Contracting Government or Governments or the competent authority should ensure that:

- a legal basis for the operation of a VTS is provided for and that the VTS is operated in accordance with national and international law;
- a VTS authority is appointed and legally empowered.

The Contracting Government / competent authority should ensure the on-going effectiveness of the VTS and consistency with international guidelines through audits and/or periodic assessments. Such assessments could be managed by the Contracting Government / competent authority itself or by an accredited third party, such as an IALA approved Classification Society (IALAACS). However, even though the audits or assessments are made by a third party, the responsibility always lies with the Contracting Government / competent authority.

4.2. VTS AUTHORITY

The VTS authority should have the responsibility for the management, operation and co-ordination of the VTS, interaction with participating vessels and the safe and effective provision of the service. The VTS should be operated under a Quality Management System (QMS) and the VTS authority should ensure the on-going integrity of the QMS through periodic review / audit as described in the VTS Manual and IALA Recommendation O-132 On Quality Management for Aids to Navigation Authorities.

5. FRAMEWORK FOR AUDITING AND ASSESSING

The framework for auditing and assessing a VTS and the subsequent on-going assessment and evaluation of safe and effective provision of the service/s provided should be comprised of the following elements:

- The use of a Quality Management System (QMS);
- The use of a Safety Management System (SMS);
- The audit checklist for the assessment of a VTS, which may be found at ANNEX A;
- The guidance provided in the VTS Manual and IALA Recommendations and Guidelines regarding the establishment and operation of VTS.

5.1. CHECKLIST FOR THE AUDITING AND ASSESSING VTS

The checklist at **ANNEX A** provides a tool to assess and monitor the delivery of VTS with regards to international obligations, the IALA recommendations, guidelines and VTS Manual.

The QMS that an individual VTS authority / VTS centre operate under may have a corporate focus and a scope that does not fully cover the specific delivery of VTS. The checklist provides a robust, yet flexible, framework to ensure the VTS can be assessed and monitored in a way that facilitates consistency in the delivery of VTS services.

6. PROCEDURES FOR AUDITING AND ASSESSING VTS

IMO Resolution A.857(20) describes the principles and general provisions for the operation of a VTS and participating vessels, in addition to the roles and responsibilities of contracting governments, competent authorities and VTS Authorities.

Audits and assessments are an essential management tool to be used for verifying objective evidence of processes, to assess how successfully processes have been implemented, for judging the effectiveness of achieving any defined target levels, to provide evidence concerning reduction and elimination of problem areas.

The criteria for auditing and assessment of a VTS authority should be made available by the competent authority.

The following procedures provide competent authorities with guidelines for auditing and assessing a VTS.

Step 1 – Request

The entity¹ submits a request to the competent authority.

Prior to submission of an audit and/or assessment request, it is recommended that the entity conducts its own internal check using the audit checklist at ANNEX A.

Step 2 – Pre-audit documentation

The entity submits completed pre-audit documentation. The entity should ensure that the checklist and the supporting documentation are submitted in sufficient time to allow the competent authority to properly assess the submission.

Step 3 – Evaluation of pre-audit documentation

The competent authority evaluates the pre-audit documentation and the supporting documentation to ensure conformance with IMO Resolution A.857(20) Guidelines for Vessel Traffic Services, IALA Recommendations and Guidelines, and any additional requirements.

Does pre-audit documentation comply with the requirements?

If 'Yes', the audit can take place at an agreed time.

If 'No', the competent authority notifies the entity and provides reasons to serve as a basis for corrective actions.

Step 4 – Audit

The competent authority or a body appointed conducts an audit.

Step 5 – Audit findings

The competent authority investigates if the entity complies with the set requirements.

The competent authority notifies the entity about the results of the findings in writing and if necessary, provides reasons to serve as a basis for corrective actions.

A time limit should be set for when the entity should provide an answer with the corrective actions taken.

Step 6 – Respond to findings

The entity replies and gives information about the corrective actions taken as a result of the findings.

Step 7 – Additional audit

After the entity responds to audit findings, the competent authority or appointed body conducts an additional audit in order to ensure that the corrective actions resulting from the audit findings have been taken.

¹ Entity is the organisation seeking to be audited and/or assessed



Step 8 – Approval

The competent authority issues a document or confirmation that the entity is approved as a VTS authority / centre(s).

7. ACRONYMS

AIS	Universal Shipborne Automatic Identification System
CCTV	Closed-Circuit Television
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
IALAACS	IALA approved Classification Society
IMO	International Maritime Organization
QMS	Quality Management System
SMS	Safety Management System
SOLAS	International Convention on the Safety of Life at Sea 74 (as amended)
VTS	Vessel Traffic Services



ANNEX A AUDIT CHECKLIST FOR THE ASSESSMENT OF A VTS

A 1. GENERAL INFORMATION

No.	Issue/question	VTS notes	Auditor notes/comments
1.	Date:		
2.	Name of Auditing body:		
3.	Name of the Competent authority:		
4.	Name of the VTS authority:		
5.	Name of VTS centre(s): The full name and address of the VTS centre(s), as given in their official documentation, should be inserted.		
6.	Date of last audit: Provide a copy of the audit report.		
7.	Are internal audits carried out? Provide a copy of the assessment / audit report.		
8.	What are the type(s) of service provided by the VTS? Information Service Navigational Assistance Service Traffic Organization Service		
9.	VTS Area(s): A chart showing the delineation of the VTS area/sectors.		
10.	Allocated VHF channels: Provide a list of the allocated VTS VHF channels		
11.	Radio Call sign and name identifiers: Provide the radio call sign and name identifier of the VTS.		



A 2. DOCTRINE AND REQUIREMENT

A 2.1. LIST OF DOCUMENTS

The following documents, as updated, need to be considered for integration into internal procedures. Include national/local references and other relevant international arrangements as necessary.

References	Title	VTS notes	Auditor notes/comments
IMO Resolution A.857(20)	Guidelines for Vessel Traffic Services		
IALA Recommendation V-103	Standards for Training and Certification of VTS Personnel and associated module courses		
IALA Recommendation V-119	Implementation of VTS		
IALA Recommendation V-120	VTS In Inland Waters		
IALA Recommendation V-127	Operational Procedures for VTS		
IALA Recommendation V-128	Operational and Technical Performance Requirements for VTS Equipment		
IALA Recommendation O-132	Quality Management for Aids to Navigation Authorities		
IALA Recommendation O-134	The IALA Risk Management tool for ports and restricted waterways		
IALA Guideline 1018	Risk Management		
IALA Guideline 1034	Certification of Marine Aids to Navigation Products		
IALA Guideline 1045	Staffing Level at VTS Centres		
IALA Guideline 1052	Use of Quality Management Systems for Aids to Navigation Service Delivery		
IALA Guideline 1055	Preparing for a Voluntary IMO Audit on Vessel Traffic Services Delivery		
IALA Guideline 1071	Establishment of a VTS beyond Territorial Seas		
IALA Guideline 1083	Standard Nomenclature to Identify and refer to VTS Centres		
IALA Guideline 1089	Provision of VTS		
IALA VTS Manual			
Others...			



A 2.2. COMPLIANCE WITH REQUIREMENTS

No.	Issue/question	VTS notes	Auditor notes/comments
1.	Which government body is responsible for the implementation and enforcement of SOLAS Chapter V Regulation 12 – Vessel Traffic Services?		
2.	What national legislation is in place to enable laws to be passed to give domestic effect to SOLAS obligations, such as: Regulatory provisions? Compliance and enforcement provisions?		
3.	Is the VTS operated in accordance with IMO Resolution A.857(20)?		
4.	Describe the legislative framework in place and the measures taken to ensure compliance with IMO Res. A.857(20)?		
5.	List any internal or external stakeholder arrangements for the operation of the VTS.		
6.	Does the VTS extend beyond the territorial seas?		
7.	If yes, is this consistent with Guideline No. 1071 On Establishment of a Vessel Traffic Service beyond Territorial Seas?		
8.	Are the types of service delivered consistent with IALA Guideline 1089 ?		
9.	Any other issues to discuss?		

A 3. OPERATION

A 3.1. PROCEDURES

No.	Issue/question	VTS notes	Auditor notes/comments
1.	Do you have documented operational procedures in place? (ref: IALA Recommendation V-127)		
2.	How do you promulgate relevant VTS information to your users such as applicability, necessary reporting, etc.? For example, do you publish via IALA World VTS Guide, ALRS, User Guides, or website?		
3.	Do you have established operating procedures for incidents such as collision, allision, grounding, etc? (ref: IALA Recommendation V-127)		
4.	Do you have contingency plan(s) to ensure the availability of the VTS operations in cases of emergency (i.e. redundancy of equipment, secondary location to operate, extra staffing, etc.)?		
5.	Any other issues to discuss?		



A 3.2. PERSONNEL, TRAINING AND QUALIFICATION

No.	Issue/question	VTS notes	Auditor notes/comments
1.	Is the VTS appropriately staffed, according to an established ratio of operators and supervisors? (if any) (ref: IALA Guideline 1045 On Staffing levels for VTS Personnel)		
2.	How do you manage personnel rosters and schedules? Provide documents.		
3.	Are training courses for VTS personnel delivered according to IALA Recommendation V-103 and associated Model Courses? Provide documentation such as certificates and records of training.		
4.	Is the training provided by an accredited organization (ref: IALA Guideline 1014 On the accreditation and approval process for VTS training)?		
5.	What is your VTS operator/supervisor on the job training program? Provide documentation of qualifications.		
6.	Do you have a policy regarding the use of drugs and alcohol?		
7.	Do you have a policy on managing / preventing fatigue amongst your VTS personnel?		
8.	Any other issues to discuss?		

A 3.3. EQUIPMENT

No.	Issue/question	VTS notes	Auditor notes/comments
1.	List your operational equipment e.g. radar, AIS, CCTV, remote sites, etc. (ref: IALA Recommendation V-128 On Operational and Technical Performance Requirement for VTS Equipment)		
2.	What is your maintenance program, i.e. how do you ensure reliability of your equipment?		
3.	Do you have any systems not covered by IALA Recommendation V-128? If Yes, please provide justification.		
4.	Any other issues to discuss?		



A 4. MANAGEMENT SYSTEM

No.	Issue/question	VTS notes	Auditor notes/comments
1.	Do you have any measures in place for identifying and managing opportunities for improvement? For example, do you conduct customer satisfaction surveys with your stakeholders?		
2.	Do you have a process for taking corrective and/or preventative action as part of continually improving of the management system?		
3.	What performance measures are in place to assess and monitor that the objectives of the VTS are being met? For example, do you collect any data on the number of accident/incidents such as groundings, collisions, allisions, near-misses, and pro-active interventions by VTS Operators?		
4.	Any other issues to discuss?		