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## Acronyms List

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<th>Acronym</th>
<th>Definition</th>
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<tr>
<td>IALA</td>
<td>International Association of Marine Aids and Lighthouse Authorities</td>
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<tr>
<td>IMO</td>
<td>International Maritime Organisation</td>
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<tr>
<td>QMS</td>
<td>Quality Management System</td>
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<tr>
<td>SMS</td>
<td>System Management System</td>
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<tr>
<td>SOLAS</td>
<td>Safety of Life at Sea</td>
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<td>VTS</td>
<td>Vessel Traffic Services</td>
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<td>VTSA</td>
<td>Vessel Traffic Services Authority</td>
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1. 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.

2. Aim and Objectives

The aim of this document is to provide guidance for AMSA, prospective VTS Authorities and authorised VTS Authorities to meet their obligations under SOLAS and domestic law for the establishment and operation of VTS. In particular it aims to provide guidance for assessing the appointment of a VTS Authority and the subsequent on-going assessment and evaluation to ensure:

- Conformity with International obligations
- Conformity with the *Navigation Act 2012*
- The operational objectives of the VTS are being met
- The issues identified in determining the need for the VTS have been either alleviated or at least reduced to an acceptable level.

This guideline also aims to promote consistency in the provision of Vessel Traffic Services worldwide in order to avoid confusion about their delivery for the mariner operating in various jurisdictions.

**NOTE:** This Guideline is intended to compliment IMO and 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.
3. Legal Framework

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 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.

SOLAS is implemented in Australia by the Navigation Act 2012. Under Regulation 12 of Chapter V of SOLAS Australia is obliged to arrange for the establishment of vessel traffic services where the volume of traffic or the degree of risk justifies such services. Under Regulation 12 Australia must follow the guidelines developed by the International Maritime Organization for vessel traffic services that provide for the operation of VTS Authorities under instruments of authority to be issued by the competent authority.

The Navigation Act 2012 establishes AMSA as the competent authority for VTS in Australia and section 213 of the Act allows regulations to be made in relation to vessel traffic services.

Marine Order 64 sets out the arrangements for AMSA to regulate VTS authorities, including authorising, certification and auditing. The Order also provides for the recognition of training organisations previously accredited by AMSA and requirements for masters of vessels to provide reports required by VTS authorities and to comply with their instructions.
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:

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

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

In Australia, the relationship between the Competent Authority and the VTS Authority is provided for under the *Navigation Act 2012* and Marine Order 64 (Vessel Traffic Services). In particular, this can be summarised as:

4.1 AMSA

As the Competent Authority for VTS, AMSA is responsible for Australia’s obligations under SOLAS Regulation V/12 and IMO Resolution A.857(20), as amended. Key responsibilities of the competent authority include:

• leading on national policy for VTS in Australia;

• provide advice to government on legislation with respect to the establishment and operation of VTS in Australia;

• establishing and reviewing national standards for VTS;

• authorisation of VTS Authorities;

• auditing and reviewing the performance of a VTS in accordance with the objectives set for the VTS and conformance with IMO Resolution A.857(20), associated International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) Recommendations and Guidelines and any standards established by the Competent Authority for VTS.

• establishing the need for a coastal VTS outside the areas of jurisdiction of State Authorities in a manner consistent with IMO Resolution A.857(20), associated IALA Recommendations and Guidelines and any standards established by the Competent Authority for VTS;

• establishing and reviewing training standards for all VTS personnel;
• providing accreditation of organisations involved in VTS training and conducting a regular review of training and training standards as defined in IALA Recommendation V-103 "Recommendation on Standards for Training and Certification of VTS Personnel";

• promulgating declared VTS’s and their characteristics.

4.2 VTS Authority

The VTS authority is responsible for the operation of the service type(s) prescribed within the area delineated for each individual VTS. In particular, this includes:

1. In the context of establishing and operating a VTS the VTS Authority’s responsibilities include the requirement to:

   • establishing the need for a VTS in a manner consistent with IMO Resolution A.857(20), associated IALA Recommendations and Guidelines and any standards established by the Competent Authority for VTS;
   • establishing the service type/s to be delivered, based on the outcome above;
   • ensuring that a legal basis for the operation of a VTS is provided for;
   • applying to AMSA for designation of its VTS and approval of its VTS Area in accordance with current regulations.

2. Where authorised by the competent authority, operate the VTS within national and international guidelines and legislation. In particular, this includes:

   • ensuring the objectives of the VTS are met;
   • ensuring that the VTS is operated in conformity with IMO Resolution A.857(20), associated IALA Recommendations and Guidelines and any standards established by the Competent Authority for VTS;
   • maintaining appropriate standards of communications on channels assigned for VTS purposes;
   • ensuring that sufficient staff, appropriately qualified and suitable trained, are available to provide the type of service declared;
   • ensuring that equipment appropriate to the type of service declared is available;
   • ensuring that VTS personnel are vested with the appropriate authority and / or delegations required to fulfil their duties.

As the authority with 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 Authority / Centre should, at least, be operated under a QMS and 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. It may also operate under a SMS as appropriate.
5. Measuring Performance

Performance monitoring regimes provide a mechanism to ensure the objectives established by a VTS Authority are met and services are delivered in the best possible manner. They also provide a mechanism to:

- progressively improve the delivery of service by measuring key indicators, which reflect the performance of VTS with respect to process and risk reduction, to ensure appropriate measures can be adopted and introduced
- identify, monitor and enable VTS Authorities to keep pace and manage change and facilitate planning, prioritising and defining areas of emphasis

VTS Authorities / Centres should adopt a performance monitoring regime applicable to the type of VTS and its objectives. It can then be used as a means to continually monitor performance against objectives. Some examples are:

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<th>Objective</th>
<th>Performance Indicator</th>
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| Minimise the risk of a maritime accident and consequential ship sourced pollution and damage to the marine environment | • number of proactive interventions by VTS Operator which minimised potential accidents / incidents  
• number of accident / incidents:  
• number of grounding  
• number of collisions  
• number of near misses  
• assessment to be linked to vessel density |
| Provide VTS capable of dealing with and responding to developing traffic situations | • Availability of VTS system (The percentage availability of key equipment on a monthly and annual basis.)  
• This should be compared to the availability targets determined for the key equipment as per IALA Recommendation V-128 on Operational and Technical Performance Requirements for VTS Equipment  
• Port/VTS area traffic statistics/density |
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<tr>
<th>Objective</th>
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| Enhance relationships with allied services, stakeholders and other interested parties | • Stakeholder feedback  
• In delivering VTS services a VTS maintains close interaction and communication with its key stakeholders, that is, masters/OW/Pilots of vessels transiting the VTS area. This provides a continuous and ongoing mechanism to receive and record stakeholder satisfaction with the delivery of service. All feedback in such circumstances should be recorded and where applicable an Opportunity for Improvement raised within the QMS.  
• Feedback includes:  
  ─ Direct feedback from individual Stakeholders - whether received in writing (letter, email) or verbally (VHF radio)  
  ─ Feedback at forums with Stakeholders/via websites or social media  
• Regular meetings with allied services, stakeholders and other interested parties  
• Formal working agreements with allied services |
| Provide a safe working environment | • Accident Statistics –Lost Time Incidents |
6. Compliance Matrix for the Assessment of a VTS Authority

The Compliance Matrix provides a tool to assess and monitor the delivery of VTS with regards to international obligations, the Navigation Act 2012, IALA recommendations, guidelines and the VTS manual, as well as, recognised ‘international good practice’.

An individual VTS Authority / VTS Centre may operate within a QMS which has a corporate focus and scope that is not exclusively designed for the specific delivery of VTS. Similarly, VTS may be just a part of a larger SMS regime that covers the corporation or entity that the VTS lies within. As such, entities seeking appointment as a VTS Authority are encouraged to ensure the VTS operations are included under the scope of the QMS. The Matrix 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 nationally and worldwide.

It has also been developed to minimise any impact and possible increased workloads by avoiding duplication with established quality management / safety management systems. It aims to use the main features of these systems to provide mechanisms to map the broader obligations for the delivery of a safe and efficient VTS.

The Matrix is also intended to assist prospective entities seeking to be a VTS Authority in developing the design of their systems and in preparing for an assessment.
7. Process for Assessing, Appointing and Auditing a VTS

The process for assessing, appointing and auditing a VTS is summarised in the flowchart below:

1. Entity seeks to be appointed a VTS Authority – complete the Pre-Audit Checklist

2. Pre-Audit Checklist completed – Do you satisfy the requirements?
   - If 'No'
     - Entity to prepare documentation for submission
   - If 'Yes'

3. Entity to complete online Compliance Matrix and VTS Authority Application Form

4. Competent Authority evaluates the Compliance Matrix and supporting documentation

5. Does documentation comply with the requirements?
   - If 'Yes'
     - Competent Authority to conduct initial audit
   - If 'No'
     - Competent Authority notifies entity and provides reason for correction action

6. Competent Authority reviews corrective actions and re-submits request

7. Did the audit findings comply with the requirements?
   - If 'Yes'
     - Competent Authority appoints the entity as a VTS Authority
   - If 'No'
     - VTS Authority to apply for renewal 90 days before appointment expires

August, 2013
7.1 Activities required to complete process for assessing, appointing and auditing a VTS

Each activity shall provide a detailed description of the steps as reflected in the flow chart.

Step 1 - Entity seeks to be appointed as a VTS Authority – complete online Pre-Audit Checklist

Prior to submission of an appointment request, it is recommended that the entity completes the online Pre-Audit Checklist to ensure they are ready to be appointed a VTS.

Step 2 – Pre-Audit Checklist completed - Do you satisfy the requirements?

If ‘Yes’- Go to Step 4 - Entity to complete the online Compliance Matrix and VTS Authority Submission Form
If ‘No’- Go to Step 3 – Entity to prepare documentation for submission

Step 3 – Entity to prepare documentation for submission

Step 4 - Entity to complete online Pre-Audit Questionnaire and VTS Authority Application Form then forward to Competent Authority

The entity should ensure that the Pre-Audit Checklist, the VTS Authority Application Form, the Compliance Matrix and all supporting Annexes are completed.

Step 5 – Competent Authority evaluates the Compliance Matrix and supporting documentation

The Competent Authority evaluates the Compliance Matrix and the supporting documentation to ensure compatibility with IMO Resolution A.857 Guidelines for Vessel Traffic Services, conformance with IALA Recommendations and Guidelines, and any additional requirements.

Step 6 - Does documentation comply with the requirements?

If ‘Yes’- Go to Step 9 – Competent Authority to conduct initial audit
If ‘No’- Go to Step 7 - Competent Authority notifies the entity and provides reasons to serve as a basis for corrective actions.

Step 7 – Competent Authority notifies the Entity and provides reasons for corrective action

The Competent Authority shall notify the entity and provide reasons to serve as a basis for corrective action.

Step 8 – Entity reviews Corrective Action and re-submits

Step 9 – Competent Authority to conduct initial audit
Step 10 – Did the audit findings comply with the requirements?
- If ‘Yes’ - Go to Step 11 – Competent Authority appoints the entity as a VTS Authority
- If ‘No’ - Go to Step 7 - Competent Authority notifies the entity and provides reasons to serve as a basis for corrective actions.

Step 11 - Competent Authority appoints the entity as a VTS Authority

The Competent Authority issues the formal appointment document.  
It is recommended that the appointment be for a fixed term of no longer than 5 years.

**Note:** Section 18 (4) of Reference B states that AMSA may charge a fee for the conduct of an audit.

Step 12 – Competent Authority ensures an on-going audit regime

These regular audits determine:

- that the operational objectives are being met
- the technical and operation performance is acceptable
- the issues identified and defined in determining the need for the VTS have been either alleviated or at least reduced to an acceptable level

It is recommended that at least one audit be carried out at the mid-term of the appointment.

Step 13 - VTS Authority to apply for renewal 90 days before appointment expires

Application for renewal must be made at least 90 days before the expiry of the instrument.

It is recommended that an audit be carried out prior to the renewal of the appointment.