2. *To be left for correct numbering*.

## INTRODUCTION VTS48-8.4.1.1

As the maritime business is international by nature, it is vital to ensure that ships entering unknown and shallow waters of coastal states can rely on the fact that there are internationally agreed harmonized rules to follow to ensure the safety of the ship and marine environmental protection.

The successful organization and provision of VTS generates a self-evident need for international agreement as to how shipping from various flag-states can successfully and harmoniously interact. At the same time, there is also a need for domestic national and regional law to reflect universally accepted objectives in relation to areas that such vessels use.

It is the purpose of this chapter to demonstrate the link between internationally agreed Conventions and the successful provision of VTS at a local level as part of an effective safety management system.

This chapter handles the main international conventions and resolutions that have direct impact on VTS. However, there are furthermore several other rules that may have implicit interaction but they are left to other context.

## United Nations Convention on the Law of the Sea

UNCLOS lays down a comprehensive regime of law and order in the world’s oceans and seas; establishing rules governing all uses of the oceans and their resources. It embodies in one instrument traditional rules for the uses of the oceans and introduces new legal concepts and addresses new concerns.

UNCLOS operates at the surface of the ocean with five major regimes, namely: «internal waters», «territorial sea», «archipelagic waters», «exclusive economic zone» and «high seas». Within each major regime, there can be specific regulation for a defined area, e.g. contiguous zone, straits regimes, historic bays, etc. In each major regime the costal state can exercise its jurisdiction in accordance with its sovereignty or with its sovereign rights. In the air and at the seabed there are other major regimes.

As a result, the coastal state may adopt laws and regulations in conformity with rules of international law to ascertain the safety of navigation in internal waters (UNCLOS, art. 2 and art. 8), territorial sea (UNCLOS, art. 2 and art. 21) and archipelagic waters (UNCLOS, art. 49 and art. 52-54) as long as there is not a specific regulation which limits the coastal state’s rights. Therefore a costal state may establish (mandatory) VTS in its internal waters and in its territorial sea, as long as no special regime (eg. strait regime) prevents it.

Beyond the territorial sea, in the EEZ, it is not possible for a coastal state to establish a mandatory VTS. However the impossibility of establishing a mandatory system does not prevent the possibility of offering voluntary VTS by the respective coastal state, such as offering non-binding information and/or non-binding warnings and advice to ships which voluntary want to benefit thereof.

In straits used for international navigation, it is necessary first to identify the international regulation of the strait (strait regime).

If the strait is regulated after UNCLOS, part III, section 2, the ships have a right to transit passage. If that is the case, the situation regarding VTS can be compared with the situation in the exclusive economic zone above.

If the strait is regulated after UNCLOS, part III, section 3, the ships have a right to innocent passage under conditions, which are similar to the conditions for innocent passage through the territorial sea. If that is the case, the situation regarding VTS can be compared with the situation in the territorial sea.

If the strait is regulated after a historical regime in accordance with UNCLOS art. 35(c), it is necessary to consider the historical regime when establishing a VTS system.

If more than one country borders the strait, it is recommendable to establish a cooperation between the countries and – if possible – to establish one united VTS system.

(Note: The full text of UNCLOS is currently available at [www.un.org/Depts/los/index.htm](http://www.un.org/Depts/los/index.htm).)

## International Maritime Organization (IMO)

As a specialized agency of the United Nations, IMO is the global standard-setting authority for the safety, security and environmental performance of international shipping. Its main role is to create a regulatory framework for the shipping industry that is fair and effective, universally adopted and universally implemented.

The purpose of the Organization is summarized in Article 1(a) of the IMO Convention. The main task is to provide machinery for cooperation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade. The Organisation encourages the Member States to adopt the highest practicable standards in matters concerning maritime safety, efficiency of navigation in order to prevent and control marine pollution from ships. This includes the right to provide for the drafting of conventions, agreements or other suitable instruments, recommend these to Governments, to intergovernmental organizations, and convene such conferences as may be necessary. The Organization is also empowered to deal with administrative and legal matters related to these purposes.

(Note: The information about IMO is currently available at <http://www.imo.org/en/Pages/Default.aspx>)

### 4.3.1. Relevant IMO Conventions

Many Conventions are concerned with maritime safety, marine pollution and liability and compensation, but only SOLAS and STCW directly concern VTS. However, many others are connected to VTS.

#### 4.3.1.1. Safety of Life at Sea (SOLAS) Convention

The International Convention for the Safety of Life at Sea (SOLAS) is an international maritime treaty, which sets minimum safety standards in the construction, equipment and operation of merchant ships. It is generally regarded as the most important of all international treaties concerning the safety of ships. The first version was adopted in 1914 and it has been changed many times. The Convention in force today was adopted in 1974.

SOLAS Chapter V (Safety of Navigation) identifies certain navigation safety services that should be provided by Contracting Governments and sets out provisions of an operational nature applicable in general to all ships on all voyages. This is in contrast to the Convention as a whole, which only applies to certain classes of ship engaged on international voyages. The Chapters of SOLAS are divided into Regulations. To Vessel Traffic Services Regulation V/12 is most important. It contains five paragraphs. 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.

The SOLAS Contracting Governments have undertaken to arrange for the establishment of VTS where, in their opinion, the volume of traffic or the degree of risk justifies such services. When implementing the VTS, the guidelines developed by IMO are intended to be followed.

4.3.1.1.1. IMO Resolution A.857 (20)

Resolutions are documents that IMO or its main bodies have accepted which IMO member states are encouraged to accept and implement into their national legislation. They are documents that include recommendations or amendments to other legal documents of IMO.

IMO Resolution A.857 (20) describes the principles and general provisions for the operation of a VTS and participating ships, the roles and responsibilities of Contracting Governments, competent authorities and VTS authorities, and qualifications and training of VTS Operators.

4.3.1.1.2. Security related matters

SOLAS Chapter XI-2 and the ISPS Code provide a standardised, consistent framework for evaluating risk, enabling Governments to offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures.

The ISPS Code indirectly affects VTS centres, which are generally part of a port’s infrastructure. Port facilities, to which Chapter XI-2 applies, are required to develop and maintain a port facility security plan based on a port facility security assessment.

These facilities are also required to designate port facility security officers who, together with appropriate port facility security personnel, are required to undergo training in maritime security in accordance with the guidance given in Part B of the ISPS Code. They are also required to conduct drills and exercises with respect to the port facility security plan.

4.3.1.1.3. Ships in Need of Assistance

Regulation V/33 of SOLAS sets an obligation for the master to come to the assistance of persons in distress at sea. IMO Resolution A.949(23) - ‘Guidelines On Places Of Refuge For Ships In Need Of Assistance’, is intended for use when a ship is in need of assistance but the safety of life is not involved. It is worthy of notice that where the safety of life is involved, the provisions of the SAR Convention should continue to be followed.

The guidelines recognize that, when a ship has suffered an incident, the best way of preventing damage or pollution from its progressive deterioration is to transfer its cargo and bunkers, and to repair the casualty. Such an operation is best carried out in a place of refuge. However, to bring such a ship into a place of refuge near a coast may endanger the coastal state, both economically and from an environmental point of view, and local authorities and populations may strongly object to the operation.

The need to review the issues surrounding the need for places of refuge was included in a list of measures aimed at enhancing safety and minimizing the risk of oil pollution, drawn up in December 2000 in response to the oil tanker Erika incident of December 1999. The November 2002 sinking of the oil tanker Prestige further highlighted the issue.

4.3.1.1.4. Maritime Assistance Services

The provisions of regulations V/31, VII/6, VII/7-4 and VIII/12 of SOLAS concern ship reports in the event of dangers or incidents. IMO Resolution A.950 (23) - ‘Maritime Assistance Services’ (MAS), recommends that all coastal states should establish a MAS.

The principal purpose of MAS would be to receive various reports, consultations and notifications required in several IMO instruments, to monitor a ship’s situation if there are indications that this ship might be in need of assistance and serving as the point of contact between the ship and the coastal state or between those involved in a marine salvage operation undertaken by private facilities at the request of parties involved including the coastal state.

In many countries and due to the similarities of some of the tasks VTS or a related authority are responsible for all or some tasks of MAS and sometimes are notified as MAS to the IMO. However, this decision is based on the individual legal regime of the respective costal state and on how it chooses to organize MAS under its respective jurisdiction.

#### Standards for Training Certification and Watchkeeping (STCW)

The 1978 STCW Convention was the first to establish basic requirements on training, certification and watchkeeping for seafarers on an international level.

On 1st February 1997, the 1995 amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978 entered into force. They improved seafarer standards and, for the first time, gave IMO itself powers to check Government actions with Parties required to submit information to IMO regarding their compliance with the Convention.

The 1995 Conference was of particular importance for VTS, with the adoption of Resolution 10. The Conference invited the International Maritime Organization to consider developing provisions covering the training and certification of maritime pilots, VTSOs and maritime personnel employed on mobile offshore units for inclusion in the 1978 STCW Convention or in such other instrument or instruments as may be appropriate.

The Manila amendments to the STCW Convention and Code were adopted on 25th June 2010, marking a major revision of the STCW Convention and Code. The 2010 amendments came into force on 1st January 2012 under the tacit acceptance procedure and are aimed at bringing the Convention and Code up to date with developments since they were initially adopted, and to enable them to address issues that are anticipated to emerge in the near future.

The amendments also drew attention to the use of the SMCP (Standard Marine Communication Phrases) together with VTS procedures.

Partly in response to STCW 1995 and partly in response to demands from its membership, IALA developed a training regime (V-103) for VTSOs to match the format and requirements of those established for mariners in STCW 1995. This training regime was initially approved by IMO in MSC Circ.952, which was superseded in 2002 by MSC Circ.1065 - ‘IALA Standards for Training and Certification of Vessel Traffic Service (VTS) Personnel’ (See ANNEX C). This approval by IMO of the IALA standard of training was recognised as a significant milestone for the VTS world in general and for VTSOs in particular.

## IALA

Marine Aids to Navigation (AtoN) are defined as any device, system or service, external to vessels, designed and operated to enhance safe and efficient navigation of individual vessels and/or vessel traffic.

To achieve world‐wide improvement and harmonisation of Vessel Traffic Services IALA publishes Standards, Recommendations, Guidelines~~,~~ Manuals and other appropriate papers including Model Courses, specifically related to the development, implementation and operation of VTS.

IALA Standards are a vital component of the Strategic Vision, providing the overarching framework to harmonise Marine Aids to Navigation worldwide, including VTS, through implementation by all coastal states.

The principal components to the IALA document structure include:

1. Standards

2. Recommendations

3. Guidelines

4. Manuals and other appropriate papers including Model Courses

### Standards

An IALA Standard is a part of a framework, the implementation of which by all coastal states will harmonise Marine Aids to Navigation, including VTS, worldwide. IALA standards cover technology and services and are non‐mandatory.

IALA Standards are suitable for direct citation by States in the interest of an efficient and harmonised global delivery of VTS.

Implementation of a Standard by an AtoN-provider is at the choice of that organization. IALA Standards are not mandatory. However, if an organisation wishes to claim compliance with an IALA Standard then it should implement the Normative Recommendations referenced in the Standard.

Unlike the standards issued by some other organizations, an IALA Standard does provide technical content. It is simply a vehicle for referencing Recommendations.

Four Standards relate to VTS:

* 1040 - Vessel Traffic Services
* 1010 - AtoN Planning and Service Requirements
* 1050 - Training and Certification
* 1060 - Digital Communications Technologies

### 

### 4.4.2. Recommendations

IALA Recommendations specify what practices shall be carried out in order to comply with a Recommendation, and may be referenced, in full or in part, in an IALA Standard.

Recommendations may be referenced as Normative or Informative, where the meaning is:

* **Normative** provisions are those with which it is necessary to conform in order to claim compliance to the Standard.
* **Informative** provisions are those which specify additional desirable practices but with which it is not necessary to conform in order to claim compliance to the Standard.

### Guidelines

IALA Guidelines describe how to implement practices normally specified in a Recommendation.

### Model Courses

IALA Recommendation V-103 - on the Standards for Training and Certification of VTS Personnel sets out the training requirements and certification standards for VTS personnel. Amongst other things, the Recommendation provides the basis for model courses to establish a training programon the specific knowledge and skill requirements necessary for qualification as a VTS Operator.

### Documentation Relating to VTS

The Standards, Recommendations, Guidelines and Model Courses specifically related to the development, implementation and operation of VTS are within Annex 1.

The IALA Standards and associated documentation specifically related to VTS are provided in chapter <x - title>.

For further information on IALA Standards is available at <link to IALA website>.