

# THE WORLD VTS GUIDE



12<sup>th</sup> International IALA  
**VTS Symposium**  
*Beyond the limits* 2012

Website: [www.vts2012istanbul.info](http://www.vts2012istanbul.info)

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June 2011 Issue 4

World VTS Guide Newsletter

## Message from the Chairman - Gary Prosser

Welcome to the fourth edition of the World VTS Guide Newsletter. This is aimed at the ports who are members of the Guide, our shipowner users, members of the international maritime committee and the industry that provides us with VTS products and services.

For those of you not familiar with the Guide, its aim is to provide masters of ships, navigators and interested persons with readily accessible and concise information regarding the navigational requirements of VTS centres around the world. To help the busy reader, the details of each VTS system are described in standard format and you will find examples on the website under 'Port Finder'. Particular attention has been paid to the communications requirements of each VTS area and to facilitate rapid access, these details are now available on the World Wide Web where you are invited to take a look at:

<http://www.worldvtsguide.org>

At the World VTS Guide we recognise the important contribution made by VTS to maritime safety. This contribution is clearly acknowledged by the IMO, as reflected in SOLAS Chapter V, IMO Resolution A.857(20), MSC Circular 952. The World VTS Guide also has the active support of the International Hydrographic Organisation (IHO) which provides an observer at meetings of the Guide's Board. Here representatives of IALA along

with those from The International Association of Ports and Harbors (IAPH), The International Maritime Pilots' Association (IMPA), The International Harbour Masters' Association (IHMA) and The International Federation of Shipmasters' Associations (IFSMA) meet regularly to discuss the business of the Guide. One principal activity is to encourage ports to consider preparing entries for publication.

The World VTS Guide is administered by an independent Board made up of the organisations listed above and is a non-profit making organisation. The only costs incurred by contributors are those associated with the production of the entry, which will vary depending on its complexity.

IALA provides the Secretariat for the Board and meetings are chaired by Gary Prosser, the Secretary General, ably assisted by Captain Paul Owen, Editor of the Guide, Ms Virginia Butler, Co-ordinator and Paul Ridgway, Secretary.

Meetings are held once or twice a year and discuss a broad agenda embracing such topics as the Guide's financial position, the report from the Editor on progress with the various ports being prepared for the Guide and any other business particularly concerning VTS activities world-wide.



Finally, I encourage readers to consider attending the 12<sup>th</sup> VTS Symposium to be held between 10<sup>th</sup> and 14<sup>th</sup> September 2012 in Istanbul. The theme will be **Beyond the Limits**. Further details will be found in this newsletter and I am pleased that Captain Tuncay Cehreli, Directorate General of Coastal Safety, Turkey and Chairman of the IALA VTS Committee has kindly contributed an article on navigation in the Istanbul Strait as a means of introducing this event. This Strait with a length of 17 nautical miles is part of the Turkish Straits which has a total length of 164 nautical miles. The Turkish Straits link the Black Sea to the Aegean and the Mediterranean Seas, and have dense maritime traffic as well as geopolitical and strategic importance. These features will occupy us all as we prepare for the symposium. \*\*\*



### Navigation in a Unique Strait

**By Captain Tuncay Cehreli, Chairman, IALA VTS Committee  
Directorate-General of Coastal Safety, Turkey**

Navigation in a narrow strait is always difficult, risky and stressful for all shipmasters. In this article, I will mention the Istanbul Strait, one of the most challenging waterways in the world, and the risks which may be faced while passing through this Strait.



### Istanbul Strait

Istanbul Strait with length of 17 nautical miles is part of the Turkish Straits which has a total length of 164 nautical miles. The Turkish Straits link the Black Sea to the Aegean and the Mediterranean Seas, and have dense maritime traffic as well as geopolitical and strategic importance.

Currents have a special place within meteorological and hydrological conditions changing subject to climate. Four current types constitute the current model of the Istanbul Strait. The southern surface current which occurs because the Black Sea is approximately 20cm higher than the Aegean and its speed can reach up to six or seven knots. The northern deep current occurs because the Black Sea has less sea water density than the Aegean and its speed can reach up to two or three knots. Regional counter currents occur because of the geographical structure and there is the Orkoz current which is unique to the Istanbul Strait. The Orkoz occurs because strong southerly winds change the direction of the southern surface current to the north. Dangerous currents, sharp bends, narrows and low visibility from time to time are important factors affecting navigational safety in a negative way and these factors make the Istanbul Strait a difficult and risky waterway for shipmasters.

### Updates

Updates were recently completed for Vladivostok, Peter the Great Bay and Nakhodka in Russia and for the Turkish Straits. In Japan a major update programme is in progress for the VTS at Kurushima Kaikyo, Kanmon Kaikyo, Tokyo Bay, Ise Wan, Nagoya, Akashi Kaikyo, Bisan Seto, Yokohama, Osaka and Kobe.

### IMO Resolution A.857(20)

The existence of a Guide is mentioned in IMO documentation. On 3<sup>rd</sup> December 1997 it was introduced in Resolution A.857(20) *Guidelines for Vessel Traffic Services*. See section 2.2.3.8 under GENERAL CONSIDERATIONS FOR VESSEL TRAFFIC SERVICES; Responsibilities and liabilities and section 2.3.5 VTS services. Furthermore the publication is listed in 3.3.2.4 under Further guidance on vessel traffic services.

*The World VTS Guide*, produced by IALA, IAPH, IMPA, IFSMA and IHMA was recognised at the 71<sup>st</sup> session of the IMO Maritime Safety Committee in May 1999.

At the recent IALA VTS Committee meeting held in Copenhagen, during March, consideration was given to updating IMO Resolution A.857(20), "*Guidelines for Vessel Traffic Services*". It is understood this work will continue at the next committee meeting scheduled for September.

*The World VTS Guide* is a not for profit organisation. As the information is provided free of charge to the end user, the *Guide* needs to recover its costs which it does by making a small charge to the information providers to cover the costs of producing the information in the standard format and maintaining the website, which can be found at [www.worldvtsguide.org](http://www.worldvtsguide.org)

Sponsors of the VTS information provided in the Guide include Kongsberg, an Industrial Member of IALA.

### Authenticity

The information contained in *The World VTS Guide* has been supplied by the VTS Centres, or by their operating authority. Prior to publication, every item is checked by the VTS Centre concerned, and every effort is made to ensure that it is faithfully reproduced. The publisher cannot be held responsible for any inaccuracies or omissions.

Coastline detail is shown in diagrammatic form, and is NOT for navigational use. Original coastlines have been taken from the appropriate official sources, as provided by the VTS Authority.

Readers of this newsletter are encouraged to view *The World VTS Guide* on the website and to suggest to the Editor by e-mail: [admin@worldvtsguide.org](mailto:admin@worldvtsguide.org) any ports they feel should be included.

Similarly, ports or VTS authorities interested in being included are invited to contact the Editor.

Manufacturers and providers VTS products and services are encouraged to inform their clients of the existence of *The World VTS Guide* and to invite them to apply to have their ports' details published if they are not already included. Again, they are invited to get in touch with the Editor as above.

It is important that ports' details are kept up to date taking account of any amendments in the charts and the other information provided on the website.



Actually, it has been taught to all VTS Operators in their training that while rendering NAS, course advice may also be given when deemed as necessary or upon request by vessels. But we do not desire that NAS only is to be considered as providing course advice.

#### Slot management

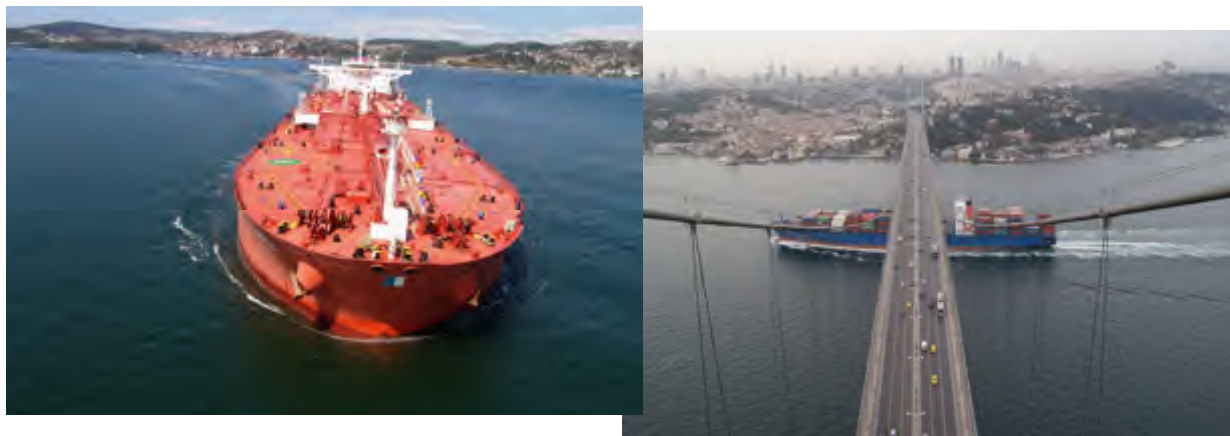
In addition to geographical, meteorological, and hydrological conditions and limits, passage rules and the huge number of vessels intending to pass through the Straits has necessitated slot management in the Istanbul and Canakkale Straits executed by VTS. Because of a continuing submarine tunnel project, one way traffic has been implemented since 2005 in the Istanbul Strait in which two-way traffic was defined by an IMO approved TSS.

In the slot management implementation based on the current passage rules, the first come-first served rule is applied, and no vessel has passage priority in general except passenger and livestock vessels.

In slot management where the convoy system is not applied, passage sequences for vessels are determined by three main criteria. These are:

- Vessel related information (arrival time, type, cargo, length, speed, draught, and request for pilot and tug boat)
- Environmental conditions (visibility range, current speed and direction)
- Geographical positions (entrances of the Strait, the narrowest area and some reference points in the Strait to determine distance between vessels)

Information provided by vessels should be on time and correct in order to make a proper and effective slot management. Especially, maximum manoeuvring speed of the vessel is very important for its slot to be determined for the prevention of dangerous encounters and overtaking. In the slot management executed by TSVTS, it has been foreseen that vessels do not overtake each other in the Strait. However, except the narrowest area of the Strait, vessels may overtake each other by taking permission from VTS. If there is no overtaking intention, the following distance between vessels cannot be less than eight cables. Slot management in narrow waterways forms the basis of traffic organization. Undesirable dangerous situations can be prevented if slot management is planned and applied properly. It should not be forgotten that, good communication, interaction and mutual understanding between VTS and the vessel are vital as well.



#### Conclusions

No master wants to put his/her vessel in distress, whatever his/her education and certificate level is, and he/she will try to keep the vessel out of danger as much as possible. However, this is not so simple in a waterway such as the Istanbul Strait, because environmental factors of currents and visibility can show big differences in a short period of time. Therefore, each passage is unique through the Istanbul Strait and different manoeuvres may be necessary in another passage with the same vessel. No matter how well found and competent your vessel and personnel may be risks and dangers arising from another vessel can be upon you within a few minutes.

It should not be forgotten that even a small pollution event in the Istanbul Strait, which is a biological corridor between the Black Sea and the Aegean-Mediterranean Seas may cause a huge environmental catastrophe.

Closing the Strait to maritime traffic as a result of an accident may have a huge effect on world maritime trade. Such a situation occurred in 1994 as a result of collision between the tanker *Nassia* and the vessel *Ship Broker*. Twenty-nine crew members lost their lives and 20,000 tonnes of oil pollution occurred and the Strait was closed to maritime traffic for a week.

In order to prevent undesirable circumstances and not to be faced with similar situations we at the Directorate General of Coastal Safety, Turkey, strongly recommend that vessels passing through the Turkish Straits:

- Take a pilot for all passages
- Take an escort tug for vessels longer than 150 metres and carrying dangerous cargoes
- Use VTS services with its good communications and interaction, and comply with instructions and take into consideration information, warning and recommendations given by VTS
- Complete all technical, procedural and operational preparations which must be undertaken before entrance, and complied with throughout the passage.

#### Navigation in a Unique Strait

##### Summary

Navigation in a narrow strait is always difficult, risky and stressful for all shipmasters. In this article, Captain Tuncay Cehreli, Chairman, of the IALA VTS Committee and on the staff of the Directorate-General of Coastal Safety, Turkey writes about the Istanbul Strait, one of the most difficult waterways in the world. He tells of the risks which may be faced while passing through this Strait which has a length of 17 nautical miles and is part of the Turkish Straits with a total length of 164 nautical miles. The Turkish Straits link the Black Sea to the Aegean and the Mediterranean Seas, and have dense maritime traffic as well as geopolitical and strategic importance. He outlines the unique current types present in these waters and the services rendered by VTS. Each year 52,000 vessels pass through the Istanbul Strait including 10,000 tankers. These vessels carry 350 million tonnes of cargo, 145 million tonnes of which are dangerous cargoes and there is dense local traffic with a daily average of 2,200 movements. It is important for shipmasters to be aware of the VTS provided and its functions. Slot management is considered and in conclusion the author outlines the basic requirements for vessels intending to pass through the Turkish Strait.

