## When is a VTS not a VTS?

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This paper traces the birth and formation of Vessel Traffic Services, examines the rapid growth of such schemes worldwide and notes the tendency for mandatory ship reporting systems to be operated from VTS centres. Questions are asked about this tendency and thoughts are provided.

## **KEY WORDS**

1. Vessel Traffic Services. 2. Mandatory ship reporting systems.

1. VESSEL TRAFFIC SERVICES RELATED LEGISLATION. In 1968, twenty years after the British Admiralty first carried out experiments with naval radar equipment set up ashore at Liverpool, the Inter Governmental Maritime Organization (IMCO) adopted Resolution, A.158(ES.IV), 'Recommendation On Port Advisory Services', subsequently followed by Resolution A.587(14) in 1985, 'Guidelines for Vessel Traffic Services' and Resolution A.857(20), 'Guidelines for Vessel Traffic Services', adopted by the International Maritime Organization (IMO) on 27 November 1997.

Forty plus years later Vessel Traffic Services (VTS) now has international approval under SOLAS Chapter V Regulation 12. In 1998 the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) published their long awaited 'Recommendation (V103) on Standards for Training and Certification of VTS Personnel'. This was quickly followed by a series of model courses covering the training qualifications for VTS Operator (VTSO), VTS Supervisor, OJT (On the Job Training) Instructor and OJT itself.

IMO Resolution A.857(20) is associated with SOLAS chapter V Regulation 12 and sets out the objectives of a VTS, outlining the responsibilities and liability of the governments involved as well as providing guidance for planning and implementing a VTS and recruiting and training of VTSOs. SOLAS Regulation 12 clearly states that a VTS can only be established within the territorial waters of a particular Flag State, that is, not in international waters. This becomes very confusing when a mandatory Ship Reporting System (SRS) is operated from a VTS centre in international waters and uses 'VTS' in its call sign.

IMO Resolution A.851(20), 'General Principles for Ship Reporting Systems and Ship Reporting Requirements, including Guidelines for Reporting Incidents Involving Dangerous Goods, Harmful Substances and/or Marine Pollutants', is associated with SOLAS V Regulation 11 concerns mandatory Ship Reporting Systems (SRS) in international waters adopted by IMO.

Another Convention is United Nations Convention on the Law of the Sea (UNCLOS). Article 21 of this Convention is extremely important for coastal states that have a high degree of vessel traffic transiting through their waters where there is a mandatory SRS. This Article provides powers to the coastal states enabling them to adopt laws and regulations to ensure the protection of the environment in general and the safety of navigation and the regulation of maritime traffic in particular. Vessel traffic can be regulated passively by the utilisation of Traffic Separation Schemes (TSS), by interaction with the centre from which operations are being managed or both.

Finally, a Convention dating back to 1936 is the Montreux Convention, which is unique to Turkey. At the time of its conception, this Convention did not make any provision for the regulation of shipping for the purposes of safety and environmental protection. However, in 1994 the Turkish government adopted new Maritime Traffic Regulations in order to ensure the safety of navigation, life and property and to protect the environment in the region but without violating the Montreux principle of free passage. The IMO adopted TSS, the Maritime Traffic Regulations and the Turkish Straits VTS have all contributed to a significant improvement in safety of navigation and protection of the environment.

2. COMPETENT HARBOUR AUTHORITIES AND THE VTS GUIDELINES. Generally speaking, the Competent Authority of a Flag State has the responsibility for the safety of navigation around the coastline of its jurisdiction. That responsibility is often delegated to a VTS or other Authority, which in turn is responsible for managing the coastline in the area or areas concerned. If the area is within territorial waters, and a risk assessment has determined that the volume of traffic or the degree of risk justifies such services, then a VTS can be established. It is important to note that at present the use of VTS may only be made mandatory in sea areas within the territorial seas of a coastal State. If the area is in international waters, such as Straits for example, then a Reporting System can be established either voluntarily or mandatorily as adopted by the IMO.

According to Resolution A.857(20) a VTS needs to have the capability to interact with vessel traffic and respond as and when necessary. SOLAS V regulation 11.6 states that a mandatory SRS shall also have the right to interact with vessel traffic, assisting with information as and when necessary. This means that the VTSOs have a duty of care to monitor and look after vessel traffic in their VTS and/or SRS area.

Resolution A.857(20) says that a clear distinction needs to be made between a Port VTS and a Coastal VTS. A VTS can actually be either but a mandatory SRS as such is clearly of the coastal type, although there may be ports and/or harbours within the same area.

3. MANDATORY SHIP REPORTING SYSTEMS. The Dover Straits has a worldwide reputation for being one of the busiest waterways in the world and has a TSS, which was adopted by the IMO in 1977. Since then many other TSS in various Straits around the world have been adopted by IMO. Likewise, more and more mandatory SRS incorporating a TSS are being adopted by IMO with most if not all of the areas being operated from a VTS centre.

In 2004 IMO adopted Resolution MSC.161(78), which gave approval to the Australian authority looking after the Torres Strait and Great Barrier Reef areas, to assist onboard decision making by providing Navigational Assistance information. Similarly in 2006, the IMO adopted Resolution MSC230(82), which gave approval to the Danish authority looking after the Great Belt area to provide individual information to a ship particularly in relation to positioning and navigational assistance or local conditions. Like the Australians, the Danish authorities are quite naturally keen to ensure the safety of navigation particularly in the vicinity of the Great Belt Bridge, which could be considered to be an offshore installation, albeit joined at both ends to the shore.

Australia and Denmark are two examples of States where the protection of their individual environments from possible adverse effects of maritime traffic is of extreme importance. In both cases their mandatory SRS were upgraded by IMO adopting the provision of navigational assistance to individual vessels in the form of information.

4. NAVIGATIONAL ASSISTANCE. IMO Resolution A.857(20) already approves and currently recognises Navigational Assistance (NAS) as one of three types of service that a VTS can provide to vessel traffic. IMO has used carefully chosen words stressing that 'instructions should be result-oriented, leaving the details of execution, such as course to be steered or engine manoeuvres to be executed, to the master or pilot on board the vessel.' In other words, one should not instruct a ship what specific course to steer or what specific speed to proceed at. NAS itself can be provided through an Information Service (INS) using the correct terminology, being guided by Resolution A.918(22) 'Standard Marine Communication Phrases' (SMCP). Any information provided by a VTS should at all times be based on fact whereas advice is based on a professional opinion.

There is much confusion over the term Navigational Assistance, with different interpretations of what it actually means including Shore Based Pilotage (SBP) which is a misnomer. When NAS is provided by a Pilot from a VTS centre it is *not* SBP, as an act of pilotage can really only be carried out by a Pilot onboard a ship itself. How NAS is provided, who provides it and when, is up to the VTS Authority, the ship's Master or both. It is a service to assist onboard navigational decision-making and to monitor its effects.

Authorities are starting to look carefully at how they can best provide advice to vessels that appear to be navigating in such a manner as to cause concern. The SMCP provides a terminological hierarchy where important message markers can be used as the sequence of events unfolds. The main message markers are Information, Warning, Advice and Instruction. There is some confusion as to the meaning of the words Advice and Instruction. Advice is based on a recommendation whilst Instruction is based on a regulation, which could be local or national. As the word Advice is based on a recommendation, it would be more assertive to use the word Recommend instead of Advice.

The difficulty arises as to what terminology should be used when it becomes increasingly apparent, even after information and warnings have been provided by the VTSO, that a vessel is not changing its course and/or speed to avoid some navigational hazard. There is a strong temptation to tell the vessel to steer a specific course. However, there are several factors that the VTSO will be unaware of, which include

what sort of compass the vessel has and how the environment is affecting the vessel. Under the pressure of stress, individual human factors vary considerably, which is why specific training in the provision of NAS, particularly on a simulator, is extremely important.

5. VESSEL TRAFFIC SERVICES AND MANDATORY SHIP REPORTING SYSTEMS. It is becoming increasingly clear that a number of mandatory SRS areas are being operated from VTS centres. This scenario creates a confusing situation with the Masters of vessels visiting and/or transiting these areas. The various acronyms and radio call signs, VTS, VTIS, Traffic and Port Control, for example, that are being used by different authorities are also confusing. Masters talking to a VTS centre (using a VTS call sign) can quite naturally think that, even though the ship is in a mandatory SRS area, the VTS centre will also provide the types of service as laid down in Resolution A.857(20).

Many emergency scenarios occurring in VTS areas also occur in SRS areas. Does the VTS centre provide navigational assistance in the form of information or take a more active role in the onboard decision-making, in other words be more assertive? In certain circumstances other traffic in the same area may also have to be re-routed to avoid a new navigational hazard.

VTS procedures are already being used in certain mandatory SRS areas. Cooperation and understanding between the ship and the shore is essential for the safe operation of vessels in both VTS and SRS areas and Masters are expected to make the best use of the VTS centre at all times in navigational decision-making. As in any navigation situation, ships' Masters and mariners are expected to exercise good seamanship and comply with the Collision Regulations.

Is there really a difference between the two operations? A VTS centre managing a mandatory SRS, albeit in international waters, can be likened to a coastal VTS. They both have authority to interact with vessel traffic and to receive and provide information as and when required. Both also contribute to safety of life at sea, safety and efficiency of navigation and/or protection of the marine environment. Some now have authority to provide specific navigational information. But is this enough? In my opinion there are certain areas which justify being able to provide any one of the three types of service offered by a VTS in territorial waters, in order to safeguard the safety of navigation and protection of the environment whether man-made or natural.

If and when IMO agree to designate VTS status to certain mandatory SRS, it is important that, in order to maintain a common performance standard, the use of current VTS procedures should be encouraged rather than re-inventing a whole new set of processes and procedures.