

ANNEX F

VTS OPERATING PRINCIPLES

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The International requirement for VTS is laid down in Chapter V of the SOLAS convention¹. The International Maritime Organisation (IMO) in IMO Resolution A.857(20), define a Vessel Traffic Service (VTS) as "a service implemented by a Competent Authority that is designed to improve safety and efficiency of vessel traffic, and to protect the environment. The service shall have the capability to interact with traffic and respond to traffic situations developing situations in the VTS area". IMO further states that a Competent Authority is: "the authority made responsible, in whole or in part, by the Government for vessel traffic safety, including environmental safety, and the protection of the environment in the area".

VTS is referenced in several International Conventions, the most important of which is the International Convention for the Safety of Life at Sea (SOLAS). SOLAS Chapter V, regulation 12 provides a specific paragraph placing a duty on Contracting Governments to oversee the implementation of VTS standards into their territorial waters.

Therefore, any VTS established in conformity with IMO guidelines is designed to improve the safety and efficiency of navigation and therefore reduce potential loss of life and protect the marine environment. A VTS should therefore provide services targeted to reduce the risk of collision, grounding, pollution, as well as delay.

IALA (the International Association of Marine Aids to Navigation and Lighthouse Authorities) is the international organisation that provides the standards for VTS. IALA has a VTS Committee that periodically publishes hardware standards, policy and training standards. This is called the VTS manual. The link between internationally agreed conventions and the provision of VTS at a local level is explained in the IALA VTS manual². A new IALS VTS manual is presently in draft and will be released in July 2008. Both the existing VTS manual (the 2002 manual) and the 2008 draft manual have been used to establish the gap between the present harbour control operation and the IALA requirements.

Essentially there are three types of VTS delivery:

1. An Information Service (INS)
2. A Traffic Organisation Service (TOS)
3. A Navigational Assistance Service (NAS)

¹ "Contracting Governments undertake to arrange for the establishment of VTS's where, in their opinion, the volume of traffic or degree of risk justifies such services".

² The 2002 IALA Manual is being updated by the 2008 manual (Edition 4), which at time of this report was in draft, for approval by the IALA VTS committee, July, 2008.

The IALA VTS manual lays out what needs to be done to derive the level of VTS required for port waters. This is essentially an analysis of traffic (type and density) using the area of VTS responsibility, to determine the level of risk posed. Different combinations of marine competence and IALA VTS training are needed for each level of VTS delivery. Once the risk is determined, the level of VTS required is established.

A scheme that successfully delivers to all these area relies extensively on the knowledge, skill and experience of the personnel responsible for the VTS system and its watch management

A well trained and experienced VTS watch has been proven to have a significant influence on ship safety by reducing transit risk through port waters. As a corollary, failing to establish the correct level of VTS (or inappropriate specification and/or operation thereof) can in itself provide a potential liability. A number of large ports have suffered large claims for being unprepared to properly deliver an appropriate VTS service³.

³ For example, Cape Town, South Africa settled two Harbour Control cases associated with shipping casualties in its harbour entrance. The failure of radar equipment was also a key aspect of litigation involving the port of Milford Haven after a significant tanker grounding