

From: VTS Committee

VTS31/8/1

Formerly VTS30/output/20

To: IALA Council

23 November 2009

Liaison Note

Developments in VTM and the role of VTS towards security

Extract from the minutes of the 46th meeting of the IALA Council.

Mike Hadley informed the Council that it had been attempted to finalise two of the deferred tasks; 18 (Guidance on the role of VTS in support of ship and port security) and 9 (Prepare a Guideline on the role of VTS in VTM, including user requirements) with inter-sessional work after VTS30. Despite considerable effort, by the VTM Working Group, it proved impossible to achieve VTS Committee unanimity and so there was an information document, asking for Council to note the current progress and, hopefully, to approve the direction that the VTS Committee is taking. He added that his personal opinion was that within the VTS Committee but outside the VTM Working Group there was a need for further education about VTM and to assist with this the VTM Working Group needed to better state and perhaps simplify their case.

The Council have noted the information contained in this document and expressed its support to the Committee's work on VTM.

1 Introduction

Despite intersessional work, following VTS30, the VTS Committee were unable to finalise two documents, which were originally aimed at seeking Council approval for their contents. One paper focussed on the role and position of VTS in VTM and the second on VTS support to security in the maritime domain.

In order that the Council may review the progress being made with these documents they are attached as Annexes A & B to this liaison note. It is requested that it be noted that both documents were drafted in the expectation that Council might approve their contents.

2 Action requested

The IALA Council is requested to:

- 1 Note the summary of the VTM Concept and Scope (at Annex A), including the revised definition of VTM and the supporting clarifications.
- 2 Note the developed vision on the supportive role of VTS towards security within the maritime domain (at Annex B), along with the developed definitions, views and clarifications;
- 3 Support the proposal to further develop the VTM Concept and the requirements and criteria by which a VTS may contribute to the delivery of the ISPS Code and task the VTS Committee accordingly in its 2010-2014 Work Programme.

THE ROLE AND POSITION OF VTS IN VTM

1 Introduction

The Vessel Traffic Services (VTS) Committee has undertaken to develop a view of the future role and responsibilities of VTS within the overarching functional framework of Vessel Traffic Management (VTM), taking into account the interdependent roles and responsibilities of allied and other related services such as law enforcement, security, search and rescue (SAR) and incident response and management. In order to develop a view of the roles and responsibilities of VTS within the VTM functional framework, an extensive evaluation of the present and expected future services from VTS needs to be clarified along with the relationship between VTS and various stakeholders within the VTM framework. This paper addresses that need.

The possible contribution of VTS towards Security is reflected in a separate document (Annex B) for noting by the Council.

2 Objectives of this document

The objectives of this document are to:

- inform the IALA Council about the views of the VTS Committee concerning the role and position of VTS within the VTM functional framework;
- identify the relationships between VTS and its related stakeholders in order to:
 - further develop the functional requirements for measures and services within the VTM framework;
 - identify other issues to be investigated, developed or resolved by the VTS Committee.

The document includes:

Paragraph 3 - Summary of the functional framework of VTM.

Paragraph 4 - Further clarification on VTM.

Paragraph 5 - Strategic, tactical and operational domain of VTM.

Paragraph 6 - The role and position of VTS within the VTM functional framework.

Paragraph 7 - Services of VTS within the VTM framework.

- ✓ the primary services;
- ✓ INS, NAS, TOS;
- ✓ Recommendations.

3 The functional framework of VTM¹

The IALA definition of VTM is:

Vessel Traffic Management is the functional framework of harmonized measures and services to enhance the safety, security and efficiency of shipping and the protection of the marine environment in all navigable waters.

The functional framework is the set of arrangements on a global, supranational, national and/or regional scale to establish conditions for safe, secure and efficient maritime traffic and for the efficient and effective use of the resources engaged. The functional framework will enable collaboration among the public and private stakeholders involved. These arrangements should be consistent, coherent and recognized by present and future (inter)national legislation and guidelines.

3.1 Definition of terms

Arrangements are agreements, international treaties, understandings or other legal mandates between two or more stakeholders within the functional VTM framework on the implementation of measures, the provision of services, the coordination of efforts, the allocation of resources and any other conditions needed to attain the aims of VTM.

Measures are the efforts by Competent Authorities to set the conditions to be respected and the provision of services to meet the aims of VTM and the compelling needs of stakeholders.

A service within VTM is an activity or a combination of activities, provided by one or more stakeholders, for the benefit of VTM stakeholders.

The aims of VTM are to enhance the safety of shipping and protection of the marine environment; the efficiency of maritime transport; the security of shipping, ports and infrastructure; and to meet stakeholder demands for reliable and current information to support the efficient employment of assets.

These aims are to be achieved through the provision of a functional framework of measures and services that enable stakeholders (ship-borne and shore-based authorities/organizations at local, regional, national and international levels) to interact and exchange information to enhance the:

- decision making process in matters concerning maritime safety and security, efficiency of navigation and of vessel traffic;
- prevention and control of marine pollution and emissions from vessels;
- strategic planning of vessel movements in confined and congested waters;
- monitoring of vessel traffic worldwide;
- efficient management of vessel movements in all navigable waters;
- operation of allied services;
- embedding and bundle all services into one co-operative management;
- services to vessels' routing and waterway management;
- optimal utilisation of the marine infrastructure and/or assets;
- services to contingency response, search and rescue, and incident and accident response.

¹ VTS29-output-6 Liaison note to IALA Council VTM Concept and Scope, approved by Council at its 45th Session, May 2009

Measures and services within the functional framework of VTM are executed on strategic, tactical and operational levels.

4 Further clarification on VTM

As defined in IMO Resolution A.857(20):

VTS is a service, implemented by a Competent Authority, designed to improve the safety and efficiency of vessel traffic and to protect the environment. The service should have the capability to interact with the traffic and respond to traffic situations developing in the VTS area.

However, while the definition of VTS is clearly understood, there remains some misunderstanding as to how to define Vessel Traffic Management.

VTM can be described as the global functional framework for all navigable waters, within which VTS may be the central instrument among various other activities. This framework shall be supported by information management.

VTM therefore is not: VTS+, VTMISS, a series of interconnected VTS centres, one or more ship monitoring systems, a large area VTM centre or an equivalent of e-navigation¹.

5 Strategic, tactical and operational domain of VTM

VTM has to be seen as the overall (overarching), structured and functional framework of strategic, tactical and operational efforts in interaction with its operating environment worldwide.

Stakeholders within VTM operate at a strategic, tactical and/or operational levels in order to ensure coordinated efforts among these various entities. Therefore, VTS as a stakeholder within VTM can operate in the strategic, tactical and operational domain of VTM. The role and position of VTS, however, can vary for these levels.

5.1 Strategic efforts

The strategic efforts target the pro-active preparation and planning of the conditions for safe, secure and efficient vessel traffic through the timely exchange of relevant information.

Communication at the strategic level implies the exchange of relevant information, in terms of quality and quantity, needed to anticipate, prepare for and execute a task in order to avoid circumstances that could lead to a hazardous or undesired occurrence. These strategic efforts may result in measures being imposed, such as policymaking and arrangement. The time horizon may range from several years to several hours.

5.2 Tactical efforts

The tactical efforts target the active monitoring and decision-making portion of the safe, secure and efficient handling of vessel traffic; including enforcement of or compliance with rules and regulations, and timely exchange of relevant information.

Communication at the tactical level includes the exchange of relevant information, in quality and quantity, needed to support decision making and proper action in the execution of a task. These tactical efforts include measures and services, such as monitoring of vessel traffic; supervision of navigation and vessel traffic handling, and the supervisory control of potential hazardous occurrences in confined waters. The time horizon may range from several hours to several minutes.

¹ e-Navigation however is supportive to the VTM framework and will provide the capabilities to support the provision of measures and services within the VTM framework

5.2.1 Clarification of supervisory control

In discussing the tactical efforts of VTS within the VTM functional framework, especially the active efforts regarding the safe and efficient handling of maritime traffic, the concept of 'Supervisory control' was used to describe application of these efforts and activities. 'Supervisory control' should be linked with the role and position of VTS within the VTM framework.

Consequently a new definition for 'Supervisory control' in this context was developed:

Supervisory control is an adaptive means of supervising activities within the VTM framework, connected to the role and position of VTS, to ensure the requirements of both the VTM Stakeholders and the VTS Authority are met.

Clarification: meeting the requirements includes the identification, assessment and control of the associated risks.

5.3 Operational efforts

Operational efforts target the reactive part (response to occurrences) of navigation and interaction with the operating environment through the 'real-time' exchange of relevant information. This includes communication at operational level: the exchange of relevant information, in quality and quantity, to guide real time decision making. These operational efforts include the safe conduct of navigation, navigational assistance from a VTS, maritime pilotage² and tugboat and linesmen assistance. The time horizon may range from several minutes to immediate.

6 The role and position of VTS within the VTM functional framework

In order to prevent confusion it should be made clear that the initials VTS is used when referring to the service. Otherwise, specifically referring to the organization, the wording VTS Authority will be used.

The **role** of VTS within VTM is its functional contribution to the aims of VTM in its capacity to interact with other stakeholders.

The **position** of VTS within VTM is considered its status relative to other stakeholders and their services, in its capacity to contribute to the aims of VTM.

Note: the existing role and position of VTS within a VTM functional framework are to be considered to identify the relationship between the VTS Authority and the other stakeholders within VTM, and to what extent they interact with each other.³

This interaction may benefit other stakeholders as well as the aims of VTM when the VTS Authority can provide vital information in addition to the provision of traditional VTS services such as Information (INS), Navigation Assistance (NAS) and Traffic Organization (TOS) The more this information is valued by the receiving stakeholders, the stronger the position of VTS related to the information exchange will be. A strong position of VTS provides the VTS Authority with the opportunity to take a central role in the management of information within the VTM framework. Holding a strong information position may result in a greater contribution to the benefits of VTM.

The **information position** of VTS within VTM is the position in which VTS is placed relative to other stakeholders, that identifies and defines its capability to collect, manage, maintain, process, provide and/or distribute data and information.

The information position of VTS determines its capability to manage the information exchange between stakeholders in the VTM framework and to set the preconditions for the use and re-use of the information exchanged.

² To be revised into 'maritime pilotage on board' in case of inconsistency with current legislation.

³ Method reflected in figure 2 in VTS29/output/6 Liaison note to IALA Council VTM Concept and Scope, approved by Council at its 45th Session, May 2009

Being in the strategic, tactical and operational domain of VTM, a VTS Authority is expected to prevent the development of dangerous situations, sustain the vessel traffic flow, inform stakeholders of the risks of vessel traffic in the VTS area that may develop in accidents or incidents and to provide support and inform other stakeholders within the VTM framework in accordance with specific arrangements with those stakeholders.

Hence, a VTS should define its relationships with other stakeholders and its subsequent information position. The information position of the VTS Authority⁴ should include a description of its institutional position (legal mandate, structure and resources), its tasks and responsibilities (mission, policy and objectives), its information requirements (data needed for VTS tasks and VTM benefits) and its limitations on data-exchange and data-sharing.

This implies that the information position of VTS should be enhanced, so that information exchange between VTS and its environment within the VTM framework is firmly established.

6.1 Relevant legislation, Recommendations and Guidelines

- UNCLOS and other UN-conventions related to the maritime domain;
- SOLAS (IMO);
- IMO Resolution A857(20);
- other relevant IMO Regulations and Recommendations as mentioned in IMO Res. A857(20) and published after 1997;
- IALA Recommendations and Guidelines related to VTS;
- IALA VTS Manual;
- international and regional developments and initiatives affecting the maritime domain.

6.2 The existing and future role and position of VTS

Limitations on the provision and execution of current and future VTS measures and services should be considered by VTS Authorities. This may have an impact on the existing and future role and position of VTS. The existing role of VTS focuses on the safety and efficiency of vessel traffic, protection of the marine environment and the relationship with allied services. According to Resolution A.857(20), the primary services of VTS should be provided within a declared VTS area. However, with respect to future functions, the role and position of VTS within the VTM framework may extend beyond the VTS area, as the VTM framework is applicable to all navigable waters⁵.

It should be recognized that VTM can exist without VTS. This depends on geographical and traffic circumstances and/or organizational arrangements in some areas. If this is the case, measures and services within the VTM framework, which are usually designated to VTS centres, may be executed or provided by other organizations (e.g. Coastguard, monitoring stations and reporting services).

A VTS Authority is not always the competent authority for other measures and services within the VTM framework. In any case, the measures and services provided in the maritime domain are still evolving as a result of the developments as identified for VTM. This may lead to changes in the role or position of current VTS within the VTM framework and to new capabilities for the VTS Authority. Therefore the

⁴ In those areas where no VTS is established, but services within VTM are provided, the organizations providing those services should also define their relationships with other stakeholders and identify their information position as described.

⁵ The role and position of VTS as described in this document does not affect the function and responsibilities of VTS, as defined in Resolution A. 857(20). The role and position - as described in the aforementioned definitions - determine the relationship with other stakeholders within VTM. Based on this relationship, specific arrangements between the VTS and those stakeholders may be put in place. The scope of any such arrangement should not exceed the context of current VTS. If that context is changed - e.g. VTS in international waters - the scope of any specific arrangement should not exceed that new context.

role of VTS within the VTM framework needs to be adaptable and sustainable. It is the responsibility of national, regional or local competent authorities, to decide on and to organize the provision and execution of the necessary measures and services within VTM and those for VTS.

6.3 Information management and exchange

The increasing number of participants and stakeholders with interest in the maritime domain requires further consideration on information management and -exchange. It is expected that the needs and increasing interest of certain participants and stakeholders in the information and services within the VTM framework may be provided by VTS. It is recognized that the present information capabilities of VTS may not fulfil all the information needs and requirements of the stakeholders, as well as the fact that information exchange needs further harmonization, standardization and interoperability. In principle, the distribution of information by VTS should be made available appropriately to stakeholders within the VTM framework. However, the wider distribution of data by VTS may be restricted by legal constraints. Aspects such as property rights, confidentiality, ownership, liability and security of data are still subject to study and investigation.

6.4 Vision and developments

The role and position of VTS within VTM begins with the need for Vessel Traffic Management. It recognizes that the VTM functional framework, of which VTS is part, should be user driven. The user requirements (including needs and specifications) of individual stakeholders within the VTM framework are still subject to further identification or development, which is considered to be an ongoing process.

7 Primary services of VTS within the VTM framework

The strong information position of VTS is of increasing interest to other stakeholders in the maritime domain, in order to fulfil their compelling needs for more, better, reliable and timely information. The primary VTS Services, in their existing state, contribute to the VTM framework constrained by preconditions for use and re-use of information. These contributions in conjunction with other stakeholders will make VTM more robust, while improving each stakeholder's individual position within the VTM framework. This improved position is therefore expected to enhance the primary services of the VTS.

7.1 Primary services

A VTS, at a minimum, should comprise an information service and may also include others, such as navigational assistance service or a traffic organization service, or both of these services, defined in Resolution A.857(20), as follows:

- an information service is a service to ensure that essential information becomes available in time for on-board navigational decision-making;
- a navigational assistance service is a service to assist on-board navigational decision-making and to monitor its effects;
- a traffic organization service is a service to prevent the development of dangerous maritime traffic situations and to provide for the safe and efficient movement of vessel traffic within the VTS area.

7.1.1 Information Service (INS)

Information Service (INS) ⁶: An Information Service provides essential and timely information to assist the on-board decision-making process. The function of INS ⁷ is outlined below and identifies the major

⁶ VTS manual 2008

activities that may be expected from this service type, together with an indication of the role that it can be expected to undertake. This service type involves maintaining a traffic image and allows interaction with traffic and response to developing traffic situations. An INS provides essential and timely marine information to assist the on-board decision-making process, which may include:

- The position, identity, intention and destination of vessels;
- Amendments and changes in promulgated information concerning the VTS area such as boundaries, procedures, radio frequencies, reporting points;
- The mandatory reporting of movements; and
- Meteorological and hydrological conditions, notices to mariners, status of aids to navigation; limited manoeuvrability that may impose restrictions on the navigation of other vessels, or any other potential hindrances.

7.1.1.1 Function positioned in the strategic, tactical and/or operational domain.

The INS functions may appear in the strategic, tactical and/or operational domain.

INS:	Strategic	Tactical	Operational
The position, identity, intention and destination of vessels;		X	X
Amendments and changes in promulgated information	X	X	
The mandatory reporting of movements	X	X	X
Meteorological and hydrological conditions, notices to mariners.....	X	X	X

7.1.1.2 Benefits for INS due to the positioning of VTS in the VTM framework

The nature of INS provided within the VTM framework will change little. However, it is expected that the exchange of information by conventional means will decrease and will be replaced by automated and digitalised options for the collection, storage and exchange of information. Therefore it is anticipated, especially for INS, that the way the service is executed will change.

7.1.2 Navigational Assistance Service (NAS)

Navigational Assistance Service (NAS)⁸: A Navigational Assistance Service may be provided in addition to an Information Service and/or Traffic Organisation Service. It is a service to assist in the on-board navigational decision-making process and is provided at the request of a vessel or when deemed necessary by the VTS. Navigational Assistance Service provides essential and timely information to assist the on-board decision making process and may inform, advise and/or instruct vessels accordingly. Such assistance requires positive identification and continuous communication throughout the process. It is important that the provision of Navigational Assistance is agreed between the vessel and the VTS providing the service. Acceptance by the vessel of the Navigational Assistance Service should be established, and the beginning and the end of navigational assistance should be clearly stated.

The function of NAS⁹ is outlined below and identifies the major activities that may be expected from this service type, together with an indication of the role that it can be expected to undertake.

Navigational Assistance may involve the provision of information, such as:

- Course and speed made good by a vessel;
- Position relative to fairway axis, navigational features and/or way-points;
- Proximity to navigational hazards; and

⁷ VTS Manual

⁸ VTS Manual

⁹ VTS Manual

- Positions, identities, intentions and any restrictions of surrounding traffic.

Navigational Assistance may also involve the additional provision of advice and/or instruction, and may include or require:

- An assessment of the suitability of the vessel to respond to the advice provided including an assessment of linguistic ability;
- A review of vessel characteristics including manoeuvrability relative to the area in which the service is provided and any defects or deficiencies;
- An assessment of the environmental conditions;
- An assessment of the implications of the cargo carried;
- A review of the proposed sailing plan;
- Recommendations on measures to maintain the sailing plan noting that any advice on courses and speeds should be result orientated;
- The use of message markers;
- The use of a dedicated frequency; and
- Restriction of other traffic movement.

7.1.2.1 Function positioned in the strategic, tactical and/or operational domain.

NAS:	Strategic	Tactical	Operational
Course and speed made good by a vessel		X	X
Position relative to fairway axis, navigational features and/or way-		X	X
Proximity to navigational hazards		X	X
Positions, identities, intentions and any restrictions of surrounding traffic		X	X
An assessment of the suitability of the vessel to		X	
A review of vessel characteristics including manoeuvrability	X	X	
An assessment of the environmental conditions		X	
An assessment of the implications of the cargo carried		X	
A review of the proposed sailing plan	X	X	
Recommendations on measures to maintain the sailing plan.....		X	X
The use of message markers			X
The use of a dedicated frequency			X
Restriction of other traffic movement			X

7.1.2.2 Benefits for NAS due to the positioning of VTS in the VTM framework

The leveraging and application of new technologies on board does not result from the positioning of VTS within VTM, requests for NAS from vessels are expected to decrease gradually due to the increasing availability of valid information on board for decision making, and the expectation that the vessel will become more self-sufficient. However, this outlook may be influenced by the level of confidence the mariner will have in the reliability and integrated presentation of the information, in the quality of the systems and the ability to use this information for effective decision-making. Therefore it is not unlikely that the expected decrease may be preceded by a temporary increase in requests for NAS.

Although NAS may be less affected than INS and TOS by the positioning of VTS within VTM, the provision of NAS from the shore (deemed necessary by VTS) may increase due to an increasing demand by authorities to ensure safe and efficient use of the navigable waters and protection of the environment.

7.1.3 Traffic Organisation Service (TOS)

Traffic Organisation Service (TOS)¹⁰: A Traffic Organisation Service is a service to provide for the safe and efficient movement of traffic and to identify and manage potentially dangerous traffic situations. A Traffic Organisation Service provides essential and timely information to assist the on-board decision-making process and may advise, instruct or exercise the authority to direct movements.

7.1.3.1 Function positioned in the strategic, tactical and/or operational domain.

	Strategic	Tactical	Operational
TOS:			
The position, identity, intention and destination of vessels	X	X	
Amendments and changes in promulgated	X	X	
The mandatory reporting of movements	X	X	X
Information such as meteorological		X	
Specific information such as traffic congestion		X	
The allocation of waterspace		X	X
Establishing and operating a system of traffic		X	
Establishing routes to be followed ...		X	X

7.1.3.2 Benefits for TOS due to the positioning of VTS in the VTM framework

The provision of TOS is the one VTS service where the impact of VTM is most likely to be felt and where changes may result in the conduct of VTS management techniques. The tactical and operational organisation of vessel traffic within the VTS area will be directly effected by the strategic decision making within the context of VTM. Equally strategic decision making within VTM will influence tactical and operational decision making with regard to the organisation of vessel traffic within the VTS area. As the VTM concept develops and, as the tools provided by e-navigation extend the effectiveness of data transfer, so too will there be an increased interdependency between the detailed organisation of vessel traffic by a VTS and the more strategic decision making under VTM. This will be seen in particular with regard to the sharing of data for advanced traffic planning and traffic monitoring, and co-operation with and coordination between allied services, port and terminal operations, emergency services and adjacent VTS.

7.1.4 Recommendation

Considering the expectation that VTS should have a major and central role and position within a global VTM framework. It may also be concluded that the quality of its services and management will become more visible to other stakeholders, and its information position may become more prominent. In order to further develop and determine the role and position of VTS within VTM, as well as the (future) provision and execution of its measures and services, a number of aspects and considerations, (such as legislation, the compelling need for enhanced information, the opportunities and limitations towards data-exchange and data-sharing, other conceptual developments) should be taken into account.

Consequently the VTS Committee recommends that the role and position of VTS within the VTM framework, as set out in this document, be reflected in future work of the VTS Committee on VTS policy and specifically in the tasks of reviewing and proposing amendments to IMO Assembly Resolution A.857(20), IMO MSC Circ.1065, and IALA recommendation V-103 in the coming session 2010-2014.

¹⁰ VTS Manual 2008

VTS SUPPORT TO SECURITY IN THE MARITIME DOMAIN

1 Introduction

The VTS Committee, supported by the e-NAV Committee, has been tasked to develop a view on the possible support of VTS toward ship and port security.

At VTS30, taking into account the input documents from the 3rd and 4th intersessional meetings of Working Group 4 (on VTM) and comments received from other Working Groups of the Committee, the VTS Committee studied and discussed subject issue.

2 Consideration of the task

The VTS Committee considered the above task and concluded that, due to the identified role and position of VTS within the VTM functional framework (document VTS30/17/2) the following should be taken into account:

- the role and especially the information position of VTS within the VTM framework;
- possible changes to current VTS measures and services (primary services);
- the possible contribution of VTS to current and future services; and
- the development of e-Navigation.

The possible stakeholders related to Security in the maritime domain will have to be identified. Also present legislation, guidelines and manuals are to be studied in order to identify the limitations of possible support of VTS to Security as well as to identify needed modifications and inconsistencies with these legislation, guidelines and manuals.

3 Maritime Security

Though much has been written about Maritime Security, there is no agreed definition. SOLAS Chapter XI provides the following definition of a Security Incident:

“Security incident means any suspicious act or circumstance threatening the security of a ship, including a mobile offshore drilling unit and a high-speed craft, or of a port facility or of any ship/port interface or any ship-to-ship activity.”

Protection against terrorist action in the maritime domain requires, among many things, a complete image of all vessel traffic in the area of concern with information on the positions, identity, intentions and cargoes of those vessels. VTS maintains and monitors a traffic image of almost all vessel traffic in their area of responsibility and in some cases the adjacent waters. VTS has trained operators monitoring this traffic. Whilst it is recognized that security issues are a national matter, VTS Centres can, at present, only contribute their unique capabilities to certain security issues. Mainly because VTS Centres are not able to see all traffic, particularly small craft, and VTS-operators are not specifically trained to recognise potential security threats nor are they qualified and equipped to deal with them.¹¹

¹¹ VTS Manual, section 0410

In order to define and justify the role and position of VTS within VTM with respect to Maritime Security, it was necessary to develop a new (working) definition.

Maritime Security is the coherent efforts by various stakeholders which are involved in the prevention and mitigation of harm to people, vessels, waterways, ports and infrastructure from intentional **illegal** acts.

4 Criteria for VTS to contribute to Maritime Security

Recognizing that institutional circumstances may differ worldwide and between countries, the following criteria for VTS to contribute to Maritime Security should be taken into account:

- depending on the authorities and responsibilities of the VTS Authority, a VTS may provide information to support maritime security services in addition to its primary VTS services;
- VTS provision of or support to maritime security services shall not compromise the provision of the primary VTS services in support of navigation safety, efficiency and protection of the marine environment;
- through its role in monitoring vessel positions, intentions and other critical information, VTS has a substantial amount of information that may be valuable for ship and port security. Through its position, VTS may make available information to aid or assist security agencies in counter-terrorist activities;
- sharing of information should occur when a VTS authority enters into specific agreement with appropriate security authorities on a case-by-case basis¹²;
- in the case VTS only supports maritime security services, the relationship between the VTS Authority and the appropriate security authorities, and their positions in the decision making processes, should be unambiguously defined in advance.

5 Contribution to the aims of VTM

The contributions and benefits of the support of VTS to Security were analysed with respect to the aims of VTM.

5.1 Security

Through routine VTS operations and interaction with maritime traffic, VTS operators familiar with the normal operations and circumstances in the VTS area may be in a position to detect and report events out of the ordinary.

VTS may assist security assessments through:

- in-depth knowledge of port and waterway infrastructure and its criticality and vulnerable locations;
- real-time knowledge of vessel activity, including scheduled movements, vessel locations and intentions;
- in-depth knowledge of regular port operations, including vessel routes, activities and port stakeholders;
- regular and continuous communications with competent vessel operators (e.g. master mariners)

¹² VTS Manual section 0410

5.2 Safety

Prevention of intentional harm to vessels, waterways and infrastructure will contribute to the safety of personnel, vessels and cargo.

5.3 Efficiency

Support from VTS can make compliance with security requirements more efficient by sharing VTS data with multiple stakeholders and one-time reporting of the same information by vessels (e.g. notice of arrival to coastguard, customs, immigration, etc.).

5.4 Protection of the environment

Prevention of intentional harm to vessels, waterways and infrastructure will reduce risks to the marine environment.

6 Identification of possible stakeholders in the relationship between VTS / Maritime Security

Law enforcement organizations	Security Organizations	Other stakeholders
Police – port, local, national	Port State Control	National administration (Coastal state)
Customs	Port authorities	Ministries
Border control	Ship Security Officer (SSO) Port Security Officer (PSO)	Ships in the area
Immigration	Military	Shipping companies
Fishery inspection		Pilot organizations

This may not be a comprehensive list.

7 Identified actions

It is recognised that VTS within VTM will benefit maritime security by the availability and support of relevant information, but that Security should not be considered as one of the primary tasks of VTS.

In order to achieve this benefit the following actions should be considered:

- the relationship between the VTS Authority and the appropriate security authorities and their positions in the decision making process should be determined unambiguously and defined in advance in arrangements between these stakeholders within VTM;
- identification of security stakeholder information needs;
- determine the use of information provided by the VTS;
- data sharing agreements between the VTS Authority and the various stakeholders;
- limitations on information sharing, including confidentiality, privacy are to be identified and guidelines on data security should be developed.

8 Action requested

The IALA Council is requested to:

- 1 Approve the developed vision on the supportive role of VTS towards Security within the maritime domain, as well as to approve the developed definitions, views and clarifications in this document;
- 2 Task the VTS Committee, in its Working Program 2010-2014, with the actions as reflected in section 7 and, in order to provide IALA's guidance, to develop the minimum requirements and criteria as to how a VTS may contribute to the delivery of the ISPS Code.