

**1<sup>st</sup> Intersessional Meeting WG4**  
**18 November 2008**  
**VTS/WG4/intersessional1/output02**

**New Working Group on Vessel Traffic Management (VTM)**

**Introduction**

During the last decades the international views concerning the observation and guidance of (passing) ships in (inter)national waters has changed. It was also recognized that, due to the technical developments/opportunities and the increasing need for advance information, physical and technical boundaries would no longer exist for those authorities involved in the management of maritime transport. For instance VTS, traditionally bounded to its own area of responsibility, could now interact with other stakeholders outside their defined area concerning traffic management matters.

New technologies provide a new dimension of capabilities and are expected to contribute positively and pro-active to the decision making processes both on board and ashore, the handling of traffic in (high density) VTS areas, a decrease of the (administrative and operational) workload onboard and ashore, the development of planning and risk management tools, the security of shipping, ports and infrastructure, the management and the re-use of information to keep the growth of equipment and data-handling systems within acceptable proportions and to support the logistic chain. New technologies have given the opportunity for efficient and effective data exchange and multipurpose employment of the collected data between all participants and stakeholders in the maritime and nautical domain.

In recent years it became quite clear to maritime interests involved in the context of traffic management that, – as a consequence of the developments mentioned - the traditional traffic management instruments and measures will not be sufficient to satisfy the needs of the stakeholders in the public and private maritime domain. However, these instruments and measures – subject to further development -, should be incorporated into a new wider concept of Vessel Traffic Management (VTM).

Since the introduction of Resolution A.857(20) and the development of e.g. LRIT and AIS monitoring of and interaction with vessels has become a global activity. Safety, security and efficiency considerations now necessitate pre-arrival information well before arrival of ships.

As a result of the effects of globalisation VTM should take under consideration the interests of stakeholders inside and outside the maritime domain. VTM has the responsibility to seek understanding between those interests and should enable all stakeholders worldwide to address their respective interests. VTM measures and services to be developed should take these interests into consideration and should be sustainable and part of a consistent framework. VTS should be incorporated in an overarching concept on a higher (strategic) level: Vessel Traffic Management. VTM would therefore comprise VTS as a central but developing instrument and also a variety of other activities, which shall be supported by management of information, the use of harmonized procedures and systems (e-navigation).

In this context VTM (by providing and exchanging reliable and current information and supported by modern technology) should not only contribute to the safety and efficiency of traffic within a defined area but also to the safety, security and efficiency of maritime traffic worldwide, the protection of the marine environment worldwide and support logistic processes (planning and connecting modes of transport) within and outside the VTS-area (inter-local, inter-regional, national, supranational and global).

VTM therefore is considered to be the overall structured framework of strategic, tactical and operational efforts in interaction with its operating environment worldwide, to meet stakeholders' demands for reliable and valuable information, to enable collaboration among public and private stakeholders, as well as to optimise the utilisation of the marine infrastructure.

The efforts encompass all measures and services that are employed in the course of berth-to-berth navigation and associated activities, including the deployment, the maintenance and the delivery of the measures and service to meet the (evolving) requirements of the end users.

The introduction and implementation of the VTM concept will have impact on legislation, responsibilities, organisation (shore and ship), primary and supportive services, processes, instruments, procedures, and systems. IMO recognized that the concept of VTM will be supported by e-navigation.

### **VTS Committee / Working Group 4 – Vessel Traffic Management**

At VTS26 the intersessional VTM Drafting Group, started its work as a sub-group under the auspices of WG1 – Operations - until VTS27. The VTM DG was dealing with Task 12 ("Define the concept and develop the scope of VTM") as a correspondence group. During the VTS2008 Symposium at a special meeting it was unanimously concluded that working as a corresponding group was not efficient and would not lead to the expected results within the given timeframe. Recognizing that the development of VTM is a very important task (and related to the development of e-navigation) it was decided that the group should continue its work as WG4 (VTM) of the VTS Committee. WG4 had its first meeting at VTS28.

### **Scope**

Based on the user driven approach the scope of VTM should be defined by the following:

- to identify its stakeholders and their compelling needs;
- to define the aims of VTM associated;
- to define the functionalities of VTM on a high abstract level;
- to assess the benefits of VTM in general;
- to identify and to describe functional requirements for VTM processes, instruments, measures and services on strategic, tactical and operational level;
- to identify the relationships between VTM and other concepts (e.g. e-navigation).

### **Objective**

The objective of the WG is to develop the worldwide concept of VTM, including to define the foreseen role and services of VTS, in order to meet the compelling needs of the stakeholders in the maritime domain. This high level concept, in a transparent relationship to other global/regional concepts and relevant developments, should respect current legislation, guidelines and/or recommendations. However, the development of the concept may also indicate the need for changes. The results of the WG shall be presented to the Council and General Assembly of IALA and after approval be presented to IMO for further development.

### **Terms of Reference**

The basis of the work of WG4 are a) the working paper carried forward from VTS26<sup>1</sup>, b) the output from the e-NAV Committee<sup>2</sup>, c) as well as the instructions and guidance given by the IALA Council<sup>3</sup>. Taking this into account the WG reached during a special intersessional

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<sup>1</sup> VTS26-WP1, further developed into version 1.6

<sup>2</sup> e-NAV4-output-08

<sup>3</sup> 41<sup>st</sup> and 42<sup>nd</sup> Sessions, 2007

meeting in Bergen/Norway<sup>4</sup>, a common understanding on the work, a number of principles and the process to be followed:

1. Study all relevant developments on vessel traffic management and identify the compelling needs of the stakeholders in the maritime domain;
2. Develop the scope of a global VTM concept; the scope should remain on a sufficient high (strategic) level;
3. Develop and/or clarify a variety of relevant definitions, harmonize recognized and non-recognized abbreviations, basic principals and other concepts within the scope of the VTM concept;
4. The working definition of VTM, as approved by the IALA Council, should be further developed and explained;
5. The development of VTM should
  - reflect a mission, presented in the document(s);
  - assist in structuring other relevant discussions;
  - give stakeholders in the maritime domain a reference of common understanding of the VTM concept on all levels (strategic, tactical and operational);
6. Develop a global VTM concept with a central position but evolving role of VTS within VTM and e-navigation;
7. Identify the ownership of VTM and the subsequent responsibilities;
8. Identify the stakeholders and the aims of VTM;
9. Identify the benefits derived from the aims and structured framework of VTM;
10. Identify and define the measures and (primary and supportive) services within VTM and future VTS;
11. Identify the functional requirements for VTM processes, its instruments and services on strategic, tactical and operational levels;
12. Identify the high level functional requirements for the management of information within VTM in order to guide and/or support the development of the VTM and the e-navigation architecture;
13. Support the development of criteria to establish VTM and future VTS;
14. WG4 shall closely work together with other Working Groups of the VTS Committee<sup>5</sup>, the e-NAV Committee<sup>6</sup> and the ANM Committee. Products and results of WG4 will be shared as appropriate. Harmonization of the products and results should be part of a continuous process;
15. Referring to the Final Reports of VTS27 and VTS28, WG4 as requested or when appropriate will contribute and/or give guidance to the work of other WGs on relevant tasks or VTM related issues, such as:
  - “Guidelines on the role of VTS in the establishing and management of limited access or restricted waters” (Task 1)
  - “Prepare a guideline on the role of VTS in regional/global Traffic Monitoring Systems”(Task 2)
  - “Develop criteria determining type of VTS services” (Task 7)
  - “Prepare guidance on sharing information amongst VTS with allied services” (Task 10)
  - “Prepare guidance on the role of VTS in the support of ship and port security”(Task 11)
  - “VTS involvement in emergency response, law enforcement, SAR and disaster management”(Recommendation 8 of VTS2008);
16. The development of VTM should provide a basis for the development of tasks for the next session of committee meetings post the IALA conference in March 2010;
17. The results of WG4 will be transferred into a (high level) strategy document addressing the concept and scope of VTM for submission and which will be presented to IALA Council by the chairman of the VTS Committee for approval. When approved the IALA

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<sup>4</sup> August 2008, doc VTS28-16-01

<sup>5</sup> WG1, WG2 and WG3

<sup>6</sup> WG1, WG2, WG3, WG4 and WG5

Council should inform IMO/NAV accordingly by either a Liaison Statement or a submission.

18. The approved definition and scope of the global concept of VTM should be proposed as a topic for presentation by the Drafting Group at the IALA Conference 2010 Capetown/South Africa.

### **Timescale**

It is envisaged that WG4 will work during VTS28, VTS29 and VTS30 on the development of the definition and scope of VTM. In between a number of intersessional meetings will be necessary. Depending on the development of tasks for the next session of committee meetings post the IALA Conference in March 2010 it may be decided that the WG has to be involved in the development of VTM in depth.

### **Action requested**

WG4 of the VTS Committee invites the VTS Committee, eNAV Committee and ANM Committee to take notice of these Terms of Reference.

The Chair of the VTS Committee is requested to forward these Terms of Reference to the IALA Council.