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Proposal for Developing Guidance on Delineating the VTS Area

# Summary

As “Developing Guidance on Delineating the VTS Area” is outlined in the IALA VTS Committee's 2023-2027 work plan, this paper discusses the need to develop the “Guidelines on Delineating the VTS Area (hereinafter referred to as the Guidelines)”, as well as the principles and considerations for developing the Guidelines and proposes recommended framework and content of the Guidelines. A draft version of the Guidelines is provided in the Annex.

## Purpose of the document

The purpose of this document is to provide reference and recommendations to support the IALA VTS Committee in developing Guidance on Delineating the VTS Area.

## Related documents

VTS53-12.1.1 VTS Committee Task Plan for 2023-2027

VTS53-12.1.2 VTS Committee Task Register for 2023-2027

G1150 Ed3.1 Establishment, Planning and Implementation a VTS

IMO Resolution A.1158(32) Guidelines for Vessel Traffic Services

# Background

IMO Resolution A.1158(32) Guidelines for Vessel Traffic Services states that “VTS area means the delineated, formally declared area for which the VTS provider is authorized to deliver vessel traffic services. The competent authority for VTS should authorize VTS providers to operate VTS within a delineated VTS area.” The rationality of delineating the VTS area is crucial to the effective functioning of VTS. While the IALA G1150 has provided some guidance on the establishment, planning and implementation of VTS, there is currently no systematic or comprehensive guiding document on the scientific and rational delineation of the VTS area. As a result, countries and regions tend to rely on their own standards and experiences, leading to inconsistencies in practice and potential risks to navigation.

As a key contributor in assisting the IMO in fulfilling its roles and responsibilities relating to VTS systems, IALA is well-positioned to develop “Guidelines on Delineating the VTS Area”. Such guidelines will serve as a reference for competent authorities for VTS and VTS providers around the world, essentially promoting global coordination and consistency in VTS operations worldwide.

# Discussion

## Necessity of the Guidelines

1 Promoting coordination and consistency in delineating the VTS area

Differences in the established standards for delineating and managing the VTS area by competent authorities for VTS and VTS providers across the world may create challenges for ships, especially when such differences relate to the management of ships in VTS areas. The Guidelines will establish uniform standards and principles, enhancing global coordination and consistency.

2 Improving the efficiency and safety of ship navigation

The unified operational guidelines based on scientific analysis and assessment will take more comprehensive consideration of factors affecting navigational safety, environmental protection and the effectiveness of emergency response, making the scope of the VTS areas and the division of each sub-area much reasonable.

3 Achieving optimization of VTS regulatory resources

Reasonable delineation of the VTS area helps achieve rational utilization of limited space resources, human resources, communication resources and other support resources, in particular coordination between neighbouring VTS areas, so as to improve the operational efficiency of the VTS system.

## Matters to be considered

1 Compliance with international conventions and regulatory requirements

In setting the principles, procedures and specific implementation of the VTS areas, full consideration should be given to meeting the requirements of relevant international conventions, national laws and regulations.

2 Wide applicability

On one hand, differences of ports within the international scope should be fully considered, and factors with different characteristics of navigational environment and ship traffic flow should be included in the scope of the Guidelines as much as possible; on the other hand, the VTS equipping conditions, including hardware, software, manpower and other resources, should be taken into account, to ensure that the delineation effectively plays the functions and roles of the VTS, so as to make the Guidelines more broadly applicable.

3 Inclusion of stakeholders in port security and shipping efficiency

Recommended procedures and considerations for communication and consultation with stakeholders, including local port authorities, shipping companies, pilot stations, terminal operators, etc., should be included in the Guidelines to ensure that the views of stakeholders are considered and that a consensus is reached as much as possible.

4 Operational convenience

The Guidelines should be clear, unambiguous and easy to implement, so as to improve safety effectiveness without unduly burdening VTS competent authorities, providers or personnel.

5 Dynamic development principle

The delineation of the VTS area is a dynamic process. A comprehensive assessment of the maritime traffic patterns and characteristics within the area should be conducted regularly and adjusted in due course, meanwhile the delineation should be compatible with local port development plans.

6 Regular review and update

Assessments and adjustments should be made in due course to reflect developments in international shipping and changes in infrastructure or safety management practices.

## Main framework and content

Considering that the Guidelines is a normative guiding document for countries to refer to when delineating the VTS area, the content should be as comprehensive and specific as possible, and that it should fully consider the responsibilities of the relevant parties involved in the delineation, the principles to be followed, and the specific workflow, etc., this paper suggests that the Guidelines should contain at least the following contents:

1 Introduction

It clarifies the purpose and significance of the Guideline's formulation as well as some crucial terms and definitions.

2 Responsibilities of all parties related to VTS

It clarifies the responsibilities and division of all parties involved in the delineation of the VTS area.

3 Factors to be considered when delineating the VTS area

It lists a number of factors that should be considered when conducting the VTS area delineation.

4 Factors to be considered when delineating VTS sub-areas

It sets out the factors to be taken into account when further dividing the delineated VTS area into smaller sub-areas, that is, when conducting VTS sub-areas delineation.

5 Principles to be followed in the delineation of VTS areas and sub-areas

It provides the specific implementers of the VTS delineation work with necessary advice and principles to be followed.

6 Implementation process for the delineation of VTS area and sub-areas

It defines the specific steps and methods for implementing VTS area and sub-areas delineation.

7 Evaluation and adjustment of the VTS area delineation

It outlines the steps and methods for evaluating the operation of VTS area and sub-areas that have been delineated, and the circumstances in which VTS areas and/or sub-areas should be changed.

# References

1. G1045 STAFFING LEVELS AT VTS CENTRES
2. G1171 HUMAN FACTORS AND ERGONOMICS IN VTS
3. VTS Communication Regulation Port of Rotterdam. Rotterdam,2010

# Action requested of the Committee

It is recommended that the Committee consider this document and the draft Guidelines provided in the annex when developing “Guidance on Delineating the VTS Area”.

annex

8.1.1.1 Draft GXXXX on Delineating the VTS Area

1. Input document number, to be assigned by the Committee Secretary [↑](#footnote-ref-1)
2. Leave open if uncertain [↑](#footnote-ref-2)