

**Economic and Social Council**Distr.: General  
20 April 2022

Original: English

---

**Economic Commission for Europe****Inland Transport Committee****Working Party on Inland Water Transport****Working Party on the Standardization of Technical  
and Safety Requirements in Inland Navigation****Sixty-first session**

Geneva, 29 June–1 July 2022

Item 8 (a) of the provisional agenda

**Promotion of River Information Services and other information  
and communication technologies in inland navigation: Guidelines  
and Criteria for Vessel Traffic Services on Inland Waterways  
(annex to resolution No. 58)****Revision of resolution No. 58 “Guidelines and Criteria for  
Vessel Traffic Services on Inland Waterways”****Note by the secretariat****I. Mandate**

1. This document is submitted in line with the Proposed Programme Budget for 2022, part V, Regional cooperation for development, section 20, Economic Development in Europe, Programme 17, Economic Development in Europe (A/76/6 (Sect.20), paragraph 20.76).
2. At its sixtieth session, the Working Party on the Standardization of Technical and Safety Requirements in Inland Navigation (SC.3/WP.3) asked the secretariat to prepare an initial proposal for updating resolution No. 58 “Guidelines and Criteria for Vessel Traffic Services on Inland Waterways”, based on the newly adopted guideline on Vessel Traffic Services (VTS) in inland waters of the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA).
3. SC.3/WP.3 may wish to consider the proposal and provide guidance to the secretariat for further work on the draft.

## II. Proposal for the updating the annex to resolution No. 58

### A. General considerations

4. The following general considerations are proposed for updating the annex to resolution No. 58:

(a) Resolution No. 58 is intended for administrations and competent authorities and aims to provide necessary information on assessing needs for establishing VTS on inland waterways, planning and implementing;

(b) The basic principles laid down in resolution No. 58 should be kept in the new text, updated or revised where necessary;

(c) The updated guidelines should build on up-to-date approaches and trends in the field of VTS that are relevant for inland waterways;

(d) The updated guidelines should take into account existing practice and standards on European inland waterways such as River Information Services (RIS);

(e) The updated guidelines should constitute a complete recommendation that should not be read in conjunction with other documents, however, for planning and establishing of VTS administrations and competent authorities should be able to make use of available manuals, standards, recommendations and guidelines developed by appropriate international organizations and associations.

5. The proposal is based on the following documents:

- IMO Resolution A.1158(32) “Guidelines for Vessel Traffic Services”
- IALA VTS Manual
- IALA Guideline G1166 “VTS in Inland Waters” (hereafter the IALA Guideline)<sup>1</sup>
- IALA Guideline G1150 “Establishing, planning and implementing a VTS”
- IALA Guideline G 1089 “Provision of a VTS”
- Other IALA recommendations and guidelines of relevance to VTS on inland waterways
- IALA International Dictionary of Marine Aids to Navigation<sup>2</sup>
- Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC
- Resolutions Nos. 57, 63, 79 and 80.

6. The key differences between the IALA Guideline and the annex to resolution No. 58 are as follows:

(a) The IALA Guideline introduces a new concept of inland vessel traffic service (inland VTS) that takes into account specific features of inland waterways;

(b) Services rendered by VTS are no longer subdivided into the Information Service, Navigational Assistance Service and Traffic Organization Service. IMO resolution A.1158(32) only identifies a vessel traffic service which comprises the provision of timely and relevant information, monitoring and managing ship traffic and responding to developing unsafe situations;

(c) Other substantial changes include the basic terms and definitions, qualifications, training and assessment, risk management and quality management;

---

<sup>1</sup> IALA Guideline G1166 “VTS in Inland Waters” is reproduced in ECE/TRANS/SC.3/WP.3/2022/12.

<sup>2</sup> <https://www.iala-aism.org/wiki/dictionary>.

(d) The IALA Guideline should be read in conjunction with the IALA VTS Manual. It identifies IALA recommendations and guidelines that may have relevance to inland VTS and offers considerations for applying or adapting IALA guidance to inland waters, which national administrations may wish to take into account when applying this to national legislation or policy.

7. Though the IALA Guideline has a worldwide scope, it contains references to the international standards for Tracking and Tracing on Inland Waterways, Electronic Ship Reporting in Inland Navigation and Notices to Skippers as examples of best practice applied in Europe. Furthermore, the terminology is aligned with the European Code for Inland Waterways and resolutions Nos. 61 and 63.

## **B. Structure**

8. SC.3/WP.3 may wish to modify the structure of the annex to resolution No. 58 taking into account IMO Resolution A.1158(32), IALA VTS Manual and the IALA Guideline as follows:

1. Introduction
2. Definitions and clarifications
3. General considerations for Inland VTS
  - 3.1 Objectives
  - 3.2 Responsibilities and liability
  - 3.3 General principles
  - 3.4 Participating vessels
4. Features of Inland VTS
  - 4.1 General provisions
  - 4.2 Vessels and Crew
  - 4.3 Vessel Traffic Flow
  - 4.4 Equipment and Systems
  - 4.5 General Navigation Environment
5. Guidance for planning, establishing and implementing an Inland VTS
  - 5.1 Regulatory and legal framework
  - 5.2 Inland VTS implementation
  - 5.3 Inland VTS operations
  - 5.4 Inland VTS communications
  - 5.5 Inland VTS auditing and assessing
  - 5.6 Inland VTS additional services
  - 5.7 Inland VTS data and information management
  - 5.8 Inland VTS technologies
  - 5.9 Data models and data encoding
  - 5.10 Training and assessment
  - 5.11 Accreditation, competency, certification and revalidation
  - 5.12 Risk management
  - 5.13 Quality management
  - 5.14 Additional guidance related to the provision of Inland VTS
6. References.

## C. Definitions

9. SC.3/WP.3 may wish to update the terms and definitions in paragraph 2.1 of the annex to resolution No. 58 as shown below:

2.1.1 Inland vessel traffic service (Inland VTS) – a service on inland waterways implemented by an authority with the capability to interact with vessel traffic and respond to developing situations within a vessel traffic service area to improve the safety and efficiency of navigation, contribute to safety of life and support the protection of the environment. (Source: IALA Guideline)

2.1.2 Competent authority – the authority made responsible by the Administration for vessel traffic services. (Source: IMO Resolution A.1158(32))

2.1.3 VTS provider – the organization or entity authorized by the Administration or competent authority to provide vessel traffic services. (Source: IMO Resolution A.1158(32))

2.1.4 VTS area – the delineated, formally declared area for which the VTS provider is authorized to deliver vessel traffic services. (Source: IMO Resolution A.1158(32)) A VTS area may be subdivided in sub-areas or sectors.

2.1.5 Inland VTS centre – the centre from which the Inland VTS is operated. Each sub-area of the VTS may have its own sub-centre.

2.1.6 VTS operator – an appropriately qualified person performing one or more tasks contributing to the services of the VTS. (Source: IMO Resolution A.1158(32))

2.1.7 VTS personnel – persons performing tasks associated with vessel traffic services, trained in vessel traffic services operations and appropriately qualified. (Source: IMO Resolution A.1158(32))

2.1.8 VTS sailing plan – a plan which is mutually agreed between a competent authority for VTS and the boatmaster of a vessel concerning the movement of the vessel in a VTS area.

2.1.9 VTS traffic image – the surface picture of vessels and their movements in a VTS area.

2.1.10 Allied services – services other than vessel traffic services involved in the safe and efficient passage of a vessel through a VTS area, such as pilotage, tugs and linesmen. (Source: IMO Resolution A.1158(32))

2.1.11 Dangerous goods – categories of goods as set out in the annex to resolution No. 79.

2.1.12 Inland waterways are rivers, lakes or other stretches of water, whether linked to the sea or landlocked, which by natural or man-made features are suitable for navigation. In the river estuary the boundary between sea and inland waterways is the baseline established in accordance with international law.

## D. General considerations for Inland VTS

10. SC.3/WP.3 may wish to update section 3.1 “Objectives” based on IMO Resolution A.1158(32) and the IALA VTS Manual:

### 3.1 Objectives

3.1.1 The purpose of VTS is to contribute to safety of life, improve safety and efficiency of navigation and support the protection of the environment within a VTS area by mitigating the development of unsafe situations through:

- Providing timely and relevant information on factors that may influence vessel movements and assist onboard decision-making

- Monitoring and managing vessel traffic to ensure the safety and efficiency of vessel movements
- Responding to developing unsafe situations.

3.1.2 The benefits of implementing a VTS are that it allows identification and monitoring of vessels, strategic planning of vessel movements and provision of navigational information and assistance. It can also assist in prevention of pollution and coordination of pollution/emergency response.

3.1.3 Amongst the most important functions that a VTS may carry out are those related to, contributing to and thereby enhancing:

- Safety of life;
- Safety of navigation;
- Efficiency of vessel traffic movement;
- Protection of the environment;
- Supporting law enforcement; and
- Protection of adjacent communities and infrastructure.

3.1.4 By being proactive, a VTS can contribute to the prevention of incidents resulting from vessel traffic movements. VTS contributes not only to the improvement of vessel traffic safety but also to the improvement of safety of life and protection of the environment.

3.1.5 Unlike other aids to navigation, VTS, being active, has the capability to interact and influence the decision-making process on board the vessel. For example, VTS might detect the development of a vessel running into danger and can thus alert such vessels accordingly. Where an incident has occurred, VTS can also be used to support other incident mitigation operations.

11. SC.3/WP.3 may wish to update sections 3.2 and 3.6 (section 3.4 in the proposed structure) based on IMO Resolution A.1158(32), IALA Recommendation R0119 “Establishment of a VTS” and IALA Guideline G1150 “Establishing, planning and implementing a VTS”. SC.3/WP.3 may also wish to add a new section 3.3 “General principles” based on IMO Resolution A.1158(32).

## **E. Features of Inland VTS**

12. SC.3/WP.3 may wish to add a new chapter 4 “Features of Inland VTS” based on chapter 3 of the IALA Guideline. SC.3/WP.3 may also wish to highlight the interaction between Inland VTS and RIS on European inland waterways.

## **F. Guidance for planning, establishing and implementing an Inland VTS**

13. SC.3/WP.3 may wish to revise the existing chapter 4 “Guidance for planning and implementing vessel traffic services” (chapter 5 “Guidance for planning, establishing and implementing an Inland VTS” in the proposed structure) based on chapter 4 of the IALA Guideline, subsection “Inland Waters Considerations”.

## **G. References**

14. SC.3/WP.3 may wish to include the list of documents referred to in the IALA guideline in a separate chapter 6.