



IALA RECOMMENDATION (NORMATIVE)

R0128 VTS SYSTEMS AND EQUIPMENT

Edition 5.0

December 2022

urn:mrn:iala:pub:r0128:ed5.0



DOCUMENT REVISION

Revisions to this document are to be noted in the table prior to the issue of a revised document.

Date	Details	Approval
June 2005	Edition 1.1 Addition of Annex 6 – Hydrological and Meteorological equipment. Annexes added as they are completed to ensure all aspects of VTS equipment are covered.	Council 36
December 2005	Edition 2.0 Restructured to include operational performance requirements. Annex 2 amended to reflect new annex on operational performance requirements. Annex 6 renamed to Annex 5 and Annex 1,3,4,6 added. Annexes added as they are completed to ensure all aspects of VTS operations and equipment are covered.	Council 37
June 2007	Edition 3.0 Editorial changes to correct errors in paragraph numbering, cross references etc. Structure of annexes harmonised, part of Annex 2 moved to new IALA Guideline (Establishment of Radar Services) Clarification of text, few sentences in annex 1 and 2. Inconsistence in cross references, table of contents etc. in edition 2.0 Varying structure of individual annexes. Users of the document provided ideas to clarification of text on some subjects.	Council 41
May 2015	Edition 4.0 Document restructured into the Recommendation in the annex and a new guideline. Incorporate changes in technology. Extend the sections that were marked “to be defined” in edition 3.	Council 60
December 2022	Edition 5.0 Update document to align with IMO Resolution <i>A.1158(32) Guidelines for Vessel Traffic Services</i> and new G1111 guidelines. Title changed from “Operational and Technical Performance of VTS Systems” to “VTS Systems and Equipment”.	Council 76



THE COUNCIL

RECALLING:

- 1 The function of IALA with respect to Safety of Navigation, the efficiency of maritime transport and the protection of the environment.
- 2 Article 8 of the IALA Constitution regarding the authority, duties and functions of the Council.

RECOGNIZING:

- 1 That this recommendation provides the framework to assist competent authorities for VTS and VTS providers when arranging for the establishment of the functional and performance requirements for VTS systems and equipment.
- 2 IALA guidelines related to the establishment of the functional and performance requirements for VTS systems and equipment include, but are not necessarily restricted to:
 - a G1111 Establishing Functional and Performance Requirements for VTS Systems and Equipment
 - b G1111-1 Producing Requirements for the Core VTS System
 - c G1111-2 Producing Requirements for Voice Communications
 - d G1111-3 Producing Requirements for RADAR Systems
 - e G1111-4 Producing Requirements for AIS
 - f G1111-5 Producing Requirements for Environment Monitoring Systems
 - g G1111-6 Producing Requirements for Electro Optical Systems
 - h G1111-7 Producing Requirements for Radio Direction Finder Systems
 - i G1111-8 Producing Requirements for Long Range Sensor Systems
 - j G1111-9 Producing Framework for Acceptance of VTS Systems

NOTING:

- 1 That IALA fosters the safe, economic and efficient movement of vessels through improvement and harmonization of marine aids to navigation, including VTS, world-wide.
- 2 The *International Convention on the Safety of Life at Sea (SOLAS) 1974, Chapter V (Safety of Navigation), Regulation 12* provides for VTS and states, inter-alia, that:
 - a Vessel traffic services (VTS) contribute to safety of life at sea, safety and efficiency of navigation and protection of the marine environment, adjacent shore areas, work sites and offshore installations from possible adverse effects of maritime traffic.
 - b Contracting Governments undertake to arrange for the establishment of VTS where, in their opinion, the volume of traffic or the degree of risk justifies such services.



- c Contracting Governments planning and implementing VTS shall, wherever possible, follow the guidelines developed by the Organization (International Maritime Organization *Resolution A.1158(32) on Guidelines for Vessel Traffic Services*).
- 3 That *IMO Resolution A.1158(32)* recognizes, inter-alia, that:
- a Contracting Governments should take account of future technical and other developments recognized by the Organization relating to VTS.
 - b Contracting Governments are encouraged to take into account IALA standards and associated recommendations, guidelines and model courses.
 - c The VTS provider should ensure that appropriate equipment, systems and facilities for the delivery of VTS are provided.
- 4 Vessel traffic services should be established and operated in a harmonized manner and in accordance with internationally approved guidelines to facilitate proper mutual understanding between ship and shore.
- 5 The establishment and on-going operation of a VTS requires the implementation and on-going maintenance of VTS systems and equipment to ensure the capability to interact with the traffic and to respond to the developing situations in the VTS area. The functional and performance requirements for VTS systems need to be carefully considered in the establishment and ongoing operation of VTS to ensure the purposes of the VTS can be achieved.

CONSIDERING the proposals of the VTS Committee.

ADOPTS the revised Recommendation *R0128 VTS Systems and Equipment Edition 5.0*.

RECOMMENDS that competent authorities for VTS, VTS providers and relevant IALA members:

1. take into account IALA standards, associated recommendations and guidelines when establishing functional and performance requirements for VTS systems and equipment, in particular, consider guideline *G1111 - Producing Functional and Performance Requirements for VTS Systems and Equipment* and its specific sub-guidelines;
2. consider cyber security when establishing requirements for VTS systems and equipment, including requirements for maintaining uncompromised operation;
3. consider *R0119 Establishment of a VTS* (and the related guideline *G1150 Establishing, Planning and Implementing a VTS*) to evaluate the operational needs to be covered within a VTS area, and to assert these needs with the VTS system and equipment to be established; and
4. re-evaluate the operational needs regularly or in response to changes in the VTS environment due to, for instance, changes in traffic, physical changes in the area or technological changes.

INVITES Members and relevant Marine Aids to Navigation authorities world-wide to implement the provisions of this Recommendation.

REQUESTS the IALA VTS Committee or other committees as the Council may direct, to keep this Recommendation under review and to propose amendments, as necessary.