 Input paper: [[1]](#footnote-1) VTS38-9.2.9

Input paper for the following Committee(s): check as appropriate Purpose of paper:

**□**ARM **□**ENG **□**PAP ☑ Input

**□**ENAV☑VTS **□** Information

Agenda item[[2]](#footnote-2) 9.2

Technical Domain / Task Number2 Technical / 6

Author(s) / Submitter(s) China Maritime Safety Administration

Proposed Revision of V-128 Draft

# Summary

IALA recommendation V-128 draft edition 4 will be discussed to approve by the committee on VTS38. To provide the comments for the daft edition, China Maritime Safety Administration (China MSA) has translated the draft to Chinese language and circulate both English and Chinese version to all related administrations, manufactures and institutions for comments. China MSA has received 23 comments to the current draft. With careful consideration, 13 comments were adopted by China MSA and are provided to the committee to consider.

## Purpose of the document

This document is provided for the reference to revise the current draft edition on V-128, operational and technical requirements for VTS equipments.

## Related documents

[1] IALA Recommendation V-128 On Operational and Technical Performance Requirements for VTS Equipment, Edition 4 Draft.

# Background

During VTS37, the working group 2 of VTS committee provided the draft edition 4 of the recommendation V-128 for approval. Due to the large size of the draft edition and limited time, some delegates raised the concerns to the approval. The committee postponed the approval to VTS38 and request the members to provide the comments to the intersessional working groups to revise the draft.

There is the largest number of VTS systems that are operated by China MSA comparing with other administrations. The standards or the requirements of VTS equipments are critical for the objectives and operations of VTS services in China. China MSA is now proposing a national standard for the VTS equipments operated in the shipping domain. The international recommendations on VTS equipments will provide an international framework to the national standard.

# Discussion

To facilitate the implementation of the Recommendation V-128 in the industry and develop a national standard of VTS equipments in the future, China MSA has translated the draft to Chinese language and circulate both English and Chinese version to all related administrations, manufactures and institutions for comments. China MSA has received 23 comments to the current draft. With careful consideration, 13 comments (See ANNEX A) were adopted by China MSA and are provided to the committee for the approval of the Recommendation.

The comments provided are based on the practical experience of China MSA and the capability of VTS systems operated in China. China MSA agrees most parts of the Recommendation, and believes that the approval of the new edition of the Recommendation will enhance the capability and efficiency of VTS services in the world.

# Action requested of the Committee

The Committee is requested to:

1. Consider the proposed revision of the Recommendation.
2. CoMMENTS FOR THE recommendation V-128 EDITION 4 (DRAFT)

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| --- | --- | --- | --- |
| **No.** | **Paragraph No. in the Draft** | **Revision Suggestion** | **Comments** |
| 1 | 1.4.7.3 Wind Considerations | In the last paragraph of section 1.4.7.3.1, add “However, If available, the specification of maximum vertical wind for radar antenna should be provided.” | The specifications for radar antennae include both survival wind speed and operational wind speed. Generally, the survival wind speed is over 70m/s, while operational wind speed is over 45m/s. In general, wind speed means maximum wind limits in the horizontal plane. It has happened at some radar sites where the radar antennae fell down while the wind speed is less than 45m/s. The investigation shows that the main reason for the falling is vertical wind. The wind resistance level in the vertical direction has been improved by using bigger fixed bolts. For the safety of radar antennas, it is recommended that radar antennae producers should mark the wind specifications of vertical wind. |
| 2 | 2.5.7.2 Probability of Detection and False Alarm Rate | In the sentence "The optimal false alarm rates for VTS applications normally lie in the range from 10-4 to 10-5 for the radar video display.", change 10-5 to 10-6  . | According to the engineering experience, the range for the optimal alarm rates is too small. |
| 3 | 2.5.10.2 Target Accuracy | At the end of the paragraph “Warning”, add “If the above land area is not available, the measurement of accuracy should be carried out in the calm sea area.” | In some cases, it is difficult to find the land area. China MSA usually use the fixed target and small fish boat mounted with reflector on the calm sea to test accuracy. |
| 4 | 3.5.1 Support to the VTS Traffic Image | At the end of section 3.5.1.4, add “Note, the corruption of position data may include the wrong timestamp." | The fusion of AIS and VTS tracks need of the information of timestamps. But the timestamp of AIS message has the possibility of being wrong or destroyed, which results in the unsuccessful fusion. |
| 5 | 4.1 Introduction | Typical meteorological parameters are those provided by weather stations and include air temperature and humidity, wind velocity and direction, and visibility. It is suggested to add rainfall and air pressure, and to specify the specification requirements. | In some weather stations, the measurements of rainfall and air pressure are available and needed for the operation of VTS. |
| 6 | 6.2.2 Bearing Accuracy | In Table 22, change the advanced level from 2 degree to 1 degree. | The requirement is too low to be applied in China, due to the large ship traffic volume and high traffic density in the coastal and inland ports of China. The RDF equipment needs to have higher bearing accuracy, and practical specification is within 1 degree. |
| 7 | 8.3.1 Coverage | Change the unit "mile" to "nautical mile". | It is better to use nautical mile to comply the practices and related international standards. |
| 8 | 8.6 Interfacing | Add “if applicable, the international standards or the local standards should be adopted as possible.” | According to the user needs of VTS systems, it is suggested that the VTS radio communication interfaces ashore should use the national standards or the internationally agreed interface standards. |
| 9 | 9.4.2 Information Held in Databases | For the type of database, add Navigation Aids database, and add shipping lane and route data in the port resources database. | The database and data are normally required for the operation of VTS Centers. |
| 10 | 9.4 Management of VTS Data | Add a new section 9.4.3 interface to describe the internal interface among subsystems of VTS. | For the VTS systems, a large number of private interfaces is often used among subsystems or modules. It would be beneficial for VTS authorities to have these interface descriptions for the maintenance. |
| 11 | 10.3.2.2 Vessel presentation | After the first sentence of Section 10.3.2.2, add “According to the requirements of the VTS authority, the vessel presentation should use different symbols to display according to the type of the vessel.” | For VTS providing TOS, it is necessary to display different vessel types with different symbols' to facilitate the traffic organization, and most VTS systems have the ability to configure the symbol to be displayed for each kind of track. |
| 12 | 11.4.2.2 CPA/TCPA | At the end of section, add "According to the requirements of VTSO, the system should be able to display, for specified vessel, all vessels and obstacles which have possibility of collision.” | For some vessels, such as LNG carriers, needs special attention during the traffic monitoring. |
| 13 | 13.3.3 Installation and Site Acceptance (SAT) | In the third paragraph, after “all supporting documentation is available", add "including the description of all interface.” | For the VTS systems, a large number of private interfaces are often used among subsystems or modules. |

1. ........
2. Annex Heading 1
   1. Annex heading 2
      1. Annex heading 3
3. ........
4. Appendix heading 1
   1. Appendix heading 2
      1. Appendix heading 3

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