Input paper: [[1]](#footnote-1) VTS52-9.6.1

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |

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

**□** ARM **□** ENG **□** PAP **X** Input

**□** ENAV **X** VTS **□** Information

Agenda item [[2]](#footnote-2) 9.6

Technical Domain / Task Number 2 1.1.1

Author(s) / Submitter(s) Task Group 1.4.3

# PREPARE A LIVING DOCUMENT ON FUTURE VTS

# background

The Committee commenced work on Task 1.4.3 – *Prepare a Living Document on Future VTS* at VTS50. Key outcomes included:

* Preparing ‘Guiding Principles’ to provide a framework for preparing a high-level reference document to assist the Committee:
  + Be cognizant of emerging practices, technologies and trends that will affect the provision of VTS.
  + Assess and monitor the potential impact, challenges, and opportunities for VTS.
  + Strategically embrace change and how existing VTS practices could be enhanced, potential new practices adopted.
  + Plan for the future, for example:
    - Adopting future work programme tasks.
    - Facilitating necessary changes to IALA Standards relating to VTS or the international legal and regulatory framework for VTS.
    - Managing any practical issues and challenges in transitioning to a more proactive role for VTS in the future.
    - Liaison/engagement with other bodies.
    - Engaging and communicating with all stakeholders and the public.
* Preparing a preliminary draft document *Future VTS - Discussion Paper*.
* Formation of a Task Group (TG1.4.3) to progress the draft document for further consideration at VTS51.

Key outcomes from VTS51 included:

* Aligning the document with the IALA’s Strategic Vision and Current Drivers and Trends.
* **Expectations for ‘Future VTS’** – A review/update of this section was completed.
* **Contributing Practices, Technologies, and Trends** – Considerable progress was made with scoping the emerging trends, technologies and practices identified that have implications for VTS and to strategically plan and coordinate embracing the change associated with these to improve the safety and efficiency of navigation, contribute to the safety of life at sea and support protection of the marine environment.
* Formation of a Task Group (TG1.4.3) to progress the draft document for consideration at VTS52.

# introduction

Participants in the Group included:

|  |  |  |
| --- | --- | --- |
| **Surname** | **First Name** | **Affiliation** |
| Trainor | Neil | Australian Maritime Safety Authority |
| Guèvremont | Jean | Canadian Coast Guard |
| Li | Yuanhang | China Maritime Safety Administration |
| Ya Lei | Ren | China Maritime Safety Administration |
| Li | Xiang | China Maritime Safety Administration |
| Sobott | Toni | Finnish Transport Infrastructure Agency |
| Aaltonen | Matti | Finnish Transport and communications Agency Traficom |
| Kallio | Esa | Fintraffic Vessel Traffic Services Ltd |
| Noguchi | Hideki | Japan Coast Guard |
| Drenth | Martijn | Dutch Pilots' Corporation |
| van Dorsser | Harmen | Port of Rotterdam Authority |
| Karlsson | Fredrik | Swedish Maritime Administration |
| Rostopshin | Dmitry | Wärtsilä |
| Eade | Peter | VISSIM |
| Trent | Michael | Radio Technical Commission for Maritime Services (RTCM) |

The Group met 4 times following VTS 51 via MS Teams.

|  |  |
| --- | --- |
| **Meeting** | **Date** |
| TG 1.4.3-01 | 14 December 2021 |
| TG 1.4.3-02 | 24 January 2022 |
| TG 1.4.3-03 | 14 February 2022 |
| TG 1.4.3-04 | 28 February 2022 |

# Discussion

Key developments /outcomes since VTS51 include:

* A revision of *Section 4.1 - Expectations for ‘Future VTS’* with a focus on:
  + Clearly articulating ‘Expectations’ at a high level and in a manner that reflects the purpose of VTS as described in IMO Resolution A.1158(32) *Guidelines for Vessel Traffic Services*.
  + Exploring the transition to ‘Future VTS’, including:
* ‘How we get there’, including ‘what is needed’ in moving to ‘future VTS’ in terms of requirements/functionality.
* The ‘role’ and ‘responsibilities’ of both VTS and other actors, including stakeholder expectations for future VTS.
* How to transition to future VTS.
* Development of a new *Section 4.2 - Realising Expectations* to explore ‘*How we get there’*, ‘*what is needed*’ in moving to ‘future VTS’.
* A revision of *Section 4.3 - Contributing practices, technologies, and trends –* Drafts for all but one of the emerging trends, technologies and practices being monitored and assessed to assist planning for VTS into the future in a manner that facilitates global harmonisation of the delivery of enhanced services and is consistent with international law have been completed as shown below:

| **Section 4.3 - Contributing practices, technologies, and trends** | | **Draft completed** |
| --- | --- | --- |
| 4.3.1 | Maritime Autonomous Surface Ships (MASS) | **Y** |
| 4.3.2 | Digital technologies and communications | **Y** |
| 4.3.3 | Green House Gas Emissions / Just in Time Arrival | **Y** |
| 4.3.4 | Advanced Decision Support Services | **Y** |
| 4.3.5 | Automated Data and Information Exchange | **Y** |
| 4.3.6 | Navigational Support / Assistance | **Y** |
| 4.3.7 | Sea Traffic Management | **To be considered at VTS52** |
| 4.3.8 | Marine Spatial Planning | **Y** |
| 4.3.9 | Interacting Objects | **Y** |
| 4.3.10 | Digital situational awareness / Common Situational awareness | **Y** |
| 4.3.11 | Slot Management | **Y** |
| 4.3.12 | New sensing technology for nearshore and port waters | **Y** |
| 4.3.13 | Long-distance sensing technology | **Y** |

Further consideration was also given to:

* + The interrelationships between the contributing practices, technologies, and trends with a view to articulating the interrelationships.
  + The links between the ‘Expected Outcome/s’ identified for each contributing practice, technology, and trend identified in *Section 4.3 Contributing Practices, Technologies, and Trends* and the expectations for ‘future VTS’ highlighted in *Section 4.1 Expectations for Future VTS*.

A copy of the revised Discussion Paper is at *(VTS52-9.6.1.1-Input Paper - Output from TG-1.4.3 - Future VTS).*

No amendments are proposed to the following documents from VTS51:

* The contents of Task Register for this task (*VTS51-7.1.2 WP VTS Task Register 2018-2022*)*.*
* The Guiding Principles (*VTS51-9.6.3 WP Guiding Principles - Future VTS*).

# Action requested of the Committee

The Committee is requested to consider the revised document prepared by TG 1.4.3 with a view to providing input at VTS52.

ENCLOSUREs:

1. Draft revision of the *Discussion Paper – Future VTS* (*VTS52-9.6.1.1 Input Paper - Output from TG-1.4.3 - Future VTS*).

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