



IALA VTS COMMITTEE

REPORT OF THE 52nd SESSION OF THE IALA VESSEL TRAFFIC SERVICES (VTS) COMMITTEE

30 March – 13 April 2022

Virtual Committee

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13 April 2022

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Report of the 52nd Session of the IALA Vessel Traffic Services (VTS) Committee Executive Summary

The 52nd session of the VTS Committee was held from 30 March 2022 – 13 April 2022 virtually with Monica Sundklev as Chair and Dirk Eckhoff as Vice-chair. The Secretary for the meeting was Thomas Southall.

155 participants from 30 countries, three Sister organisations participated in VTS52. 18 participants attended for the first time.

The VTS Committee considered 73 input papers and produced 38 output papers, including working papers, from three Working Groups.

The meeting was carried out in accordance with the updated *Virtual Committee Arrangements* online. Approximately 40 meetings were arranged.

Key outputs completed included:

- VT52-13.1.1.2 Revised Recommendation R0119 Establishment of a VTS
- VT52-13.1.1.3 Revised Guideline G1150 Establishing Planning and implementing a VTS
- VT52-13.1.1.4 Draft description of Maritime Service 1- Vessel Traffic Service
- VT52-13.1.3.1 Draft Guideline on Human Factors and Ergonomics in VTS
- VT52-13.2.2.6 WP Guideline G1111 Establishing Functional Performance Requirements for VTS systems (given provisional Committee approval – will only go forward onto Council once the sub-guidelines are ready)

The following liaison notes were prepared:

- VT52-13.1.1.1 Liaison Note to ARM on the revised Guideline G1052 Quality Management Systems for AtoN Services Delivery
- VT52-13.1.1.5 Liaison note re TG1.2.5 MASS
 - VT52-13.1.1.5.1 WP TG.1.2.5 Discussion paper - Implications of MASS from a VTS perspective (as at VT52)
 - VT52-13.1.1.5.2 WG1 - Report from TG1.2.5 and TG1.4.3 Joint Session
- VT52-13.1.1.6 Liaison note re TG1.4.3 Future VTS
 - VT52-13.1.1.6.1 WP Task 1.4.3 Future VTS Discussion Paper (as at VT52)
 - VT52-13.1.1.6.2 WP WG1 - Report from TG1.2.5 and TG1.4.3 Joint Session

Overall status of the VTS Committee 2018-2023 Work Programme after VTS52:

Task		Start Session	Planned End Session	Revised End Session	Progress Indicator			Status Overview
					Green light	Yellow light	Red light	
WG#1 – Operations								
1.1.1	Revision of IMO Resolution A.857(20) Guidelines on Vessel Traffic Services	45	47					IMO Assembly 32 approved Res. A.1158(32) on 15 Dec 2021.
	1.1.1.1 Update Guideline 1089 to be in line with Revised IMO Resolution on Vessel Traffic Services post adoption.	47	49					Approved at C72. Published Jan 2022.
	1.1.1.2 Update documents that require changes to incorporate the new terminology post adoption of the revised IMO Resolution on Vessel Traffic Services.	47	51	53				C74 approved package 1.
	1.1.1.3 Review and update Rec V-120 to be a GL on VTS in Inland Waters (under R0119)	50	51					Approved at C74.
	Consider relevant VTS documents to be revised/updated next WP	52	53					
1.1.2	I. Review and update V-119 on the Implementation of Vessel Traffic Services (R0119) (Output to be a revised Rec. and associated Guideline	47	50	49				Approved at C72.
	II. Update of R0119 Establishment of a VTS and G1150 Establishing Planning and implementing a VTS	52	52					To Council 75 for approval.
1.1.3	Develop a guideline on Competencies for Planning and Implementing	47	50					Approved at C73.
1.1.4	Develop a Guideline on the Provision of Local Port Services (LPS) other than VTS	45	45					Approved at C68.
1.2.1	Review and update V-127 on Operational Procedures for Vessel Traffic Services (split into a revised Rec. and associated Guideline)	45	50					R0127 approved at C68. G1141 approved at C73.
1.2.2	Update a Guideline 1110 on Decision Support Tools for VTS Personnel (take into account emerging concepts and technologies)	49	50	51				Approved at C74.
1.2.3	Develop a Guideline for Promulgating the Requirements of a VTS to Mariners – A VTS Users Guide Template	45	46					Approved at C69.
1.2.4	Provide VTS input to ARM (lead Committee) for the development of a Guideline on Maritime Services in the context of e-Navigation relating to VTS (merged with task 1.2.7)	45	51	>53				Merged with task 1.2.7. Draft description on merged MS1-3 sent to PAP46.
1.2.5	Develop a Guideline on the implications of maritime autonomous surface ships (MASS) from a VTS perspective	50	51	>53				Ongoing task. Continue in next WP.
	1.2.5.1 Assess the implications associated with the advent of MASS on IALA Standards specifically related to the establishment and operation of VTS (scoping exercise)	51	>53					Continue in next WP.

Task		Start Session	Planned End Session	Revised End Session	Progress Indicator			Status Overview
					Green light	Yellow light	Red light	
1.2.6	Develop a Guideline on how to develop a safety culture in VTS	50	51	>53				Ongoing task
1.2.7	Develop Guideline on the development and implementation of VTS related MS's other than MS 1, 2 and 3	46	48					C70 approved to merge with task 1.2.4 and delete task 1.2.7.
1.2.8	Develop a IALA Reference List on IALA Documentation Relating to VTS	45	49					Task discontinued. (Covered by the Secretariat.)
1.2.9	Revise R0125 and split into a Rec + GL. Relevant parts of R1014 (Portrayal of VTS Information and Data) to be incorporated into R0125.			>53				Task to be moved to next WP.
1.3.1	Update Guideline G1132 on VTS Voice Communication, including VTS standard Phrases/Phraseology	45	48	50				Approved at C73.
1.3.2	Develop guidance on VTS Digital communications (operational aspects)	51	51	53				To Council 75 to note title change.
1.3.3	Revision of IMO Resolution A.918(22) IMO Standard Marine Communication Phrases	53	>53					Continue next WP.
1.3.4	Revision of IMO Resolution A.954(23) Proper use of VHF channels at sea	53	>53					Continue next WP.
1.4.1	Continuous update of VTS Manual	46	>53					Ongoing task
1.4.2	Conduct of the Global VTS Questionnaire	45	46	>53				Pending data base management.
1.4.3	Prepare a "living document" on "Future VTS", including emerging technologies and human element	50	>53					Ongoing task Continue next WP.
1.4.4	Produce a Guideline on preparing for Zero Accident Campaign							No IMO response. Task discontinued.
WG#2 – Technology								
2.1.1	Develop Guideline on the portrayal of VTS information and data (both operational and technical aspects).	45	48	53				Include relevant issues from both V-125 and G1105.
2.1.2	Develop a Recommendation and Guideline on Cyber-Security in AtoN operations (lead by ARM, all Committees via Workshop)	52	53					
2.2.1	Review and update Recommendation V-128 on Operational and Technical Performance of VTS Systems	52	52	53				Together with task 2.2.2.
2.2.2	Review and update Guideline 1111 on Preparation of Operational and Technical Performance Requirements for VTS Systems	45	48	53				Split into one general GL and 9 sub-GLs. VTS52 provisional approval of G1111.

Task	Start Session	Planned End Session	Revised End Session	Progress Indicator			Status Overview
				Green light	Yellow light	Red light	
2.2.2 a-j Develop 9 sub-GLs under G1111 Establishing Functional Performance Requirements for VTS systems	45	52	53				Ongoing tasks.
2.2.3 Develop a Guideline on Acceptance of VTS systems	45	46	51				Merged with task 2.2.2 as one sub-GL under G1111.
2.3.1 Develop a Product Specification under the S-100 framework for VTS	45	47	>53				Ongoing task. Continue next WP.
2.3.2 Review and update Rec V-145 on the Inter-VTS Exchange Format (IVEF) Service (split into a revised Rec. and associated Guideline, including a product specification S-210))	50	51	>53				Ongoing task. Continue next WP.
2.7.1 Update G1130 (Technical aspects of information exchange between VTS and allied or other services) to include cyber-security considerations	53	53					
WG#3 –Training							
3.1.1 Develop a Guideline on human factors and ergonomics in VTS	46	49	52				To Council 75 for approval.
3.2.1 Develop a Guideline on the management of a VTS	45	49	51				Approved at C74.
3.2.2 Review, update and reformat Guideline 1045 on Staffing Level at VTS centres	45	45					Approved at C68.
3.3.1 a. Review and split R0103 (V-103) to a Recommendation and Guideline	45	48	49				Both approved at C72.
b. Review / update Model Course 103/1 – VTS Operator	47	51	53				Ongoing task.
c. Review / update Model Course V-103/2 – VTS Supervisor	52	51	>53				Continue next WP.
d. Review / update Model Course V-103/3	51	51	53				Ongoing task.
e. Review / update Model Course V-103/4	53	51	>53				Continue next WP.
f. Review / update Model Course V-103/5	53	51	>53				Continue next WP.
3.3.2 Review and update Guideline 1017 on Assessment for Recognition of Prior Learning in VTS Training	47	50					Approved at C73.
3.3.3 Produce a VTS Training Manual to complement V-103 and its model courses	48	51					C70 approved task deletion.
3.4.1 Review and update Guideline 1014 on the Accreditation and Approval to Deliver IALA VTS Model Courses	49	51					Approved at C74.
3.5.1 a. Develop guidance on VTS training for deck officers	45	46	47				Approved at C70.
b. Develop Recommendation on Marine Aids to Navigation awareness for Mariners	47	49					Approved at C72.

Legend:

Green light – progress as planned

Yellow light – risk that task needs more time and target time prolonged

Red light – target time exceeds work period

No light – task not started

Grew background - task completed, deleted or merged

Blank background - task scheduled or ongoing

Light orange background - to Council to note or approve

Table of Contents

1.	Introduction	10
1.1	Welcome from the Secretary-General	10
1.2	Approval of the agenda	11
1.3	Apologies	11
1.4	Working Arrangements	11
2.	Review of Action Items from VTS51.....	12
3.	Review of input papers	12
3.1	Input papers to VTS52	12
3.2	Input papers not related to an existing task	12
4.	Reports from other bodies.....	13
4.1	IALA	13
4.2	IMO	14
4.3	IHO	15
4.4	ITU	15
5.	Reports from Rapporteurs	15
5.1	MASS related to VTS	15
5.2	VTS questionnaire coordination group	17
5.3	e-Nav operational service description	17
5.4	IALA NAVGUIDE	17
6.	Presentations	17
7.	Work Programme 2018-2023.....	17
7.1	VTS Task Plan and Task Register for VTS52	17
7.2	Action Plan for VTS52	18
7.3	VTS tasks for Work Programme 2023 – 2027	18
8.	Establish Working Groups	18
9.	Working Group 1 – Operations (WG1).....	18
9.1	REVIEW OF INPUT PAPERS	19
9.1	Task 1.2.4 - Develop a Guideline on Maritime Services in the context of e-Navigation relating to VTS	19
9.2	Task 1.2.5 - Develop guidance on the Implications of Maritime Autonomous Surface Ships (MASS) from a VTS Perspective	20
9.3	Task 1.2.6 - Develop a Guideline on how to develop a safety culture in VTS	22
9.4	Task 1.3.2 - Develop guidance on VTS Digital communications (operational aspects)	22
9.5	Task 1.4.3 - Prepare a “living document” on “Future VTS”	23

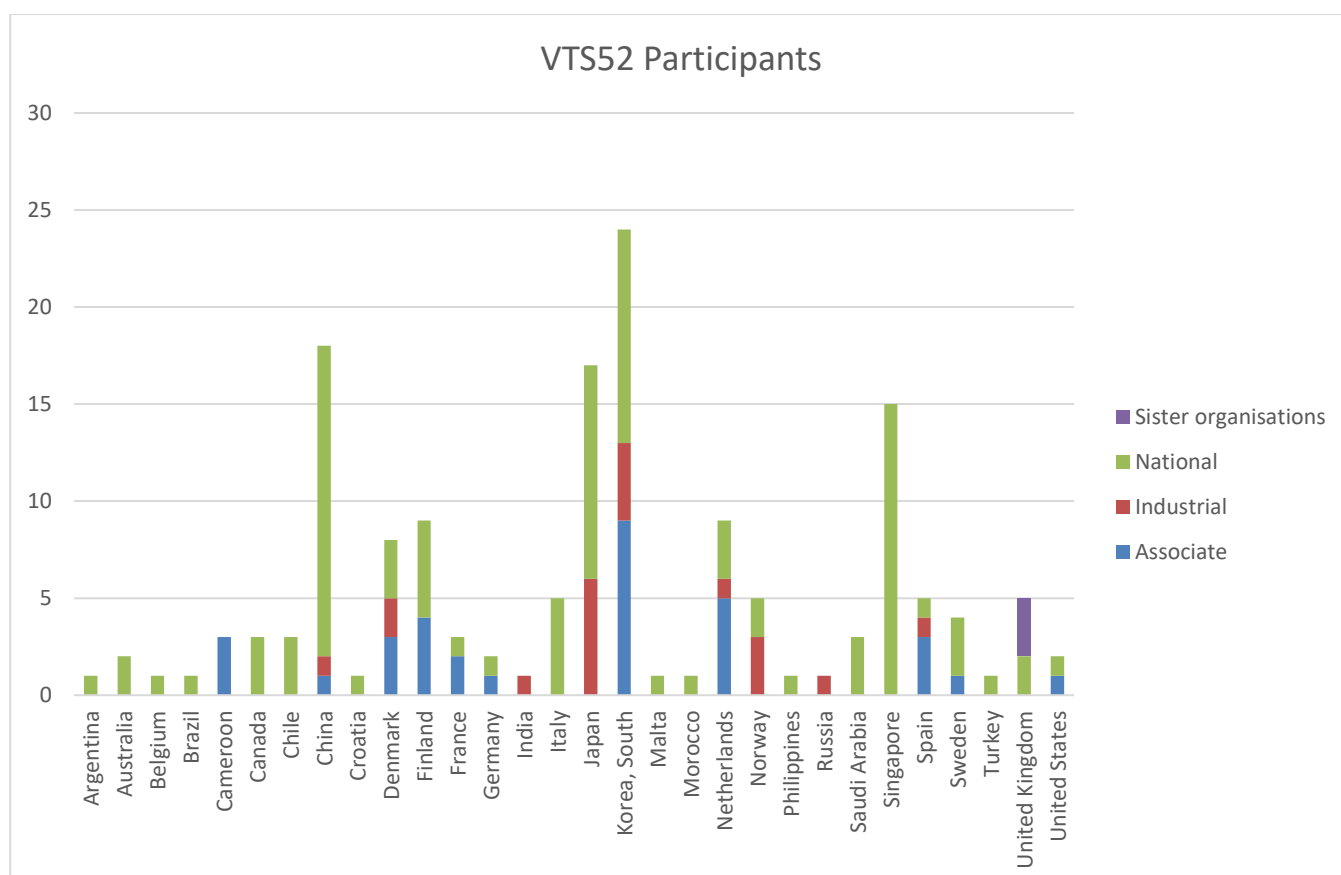
9.6	Task 1.4.1 Updates to the VTS Manual	24
10.	Working Group 2 – Technology (WG2)	24
10.1	Task 2.1.1 Develop a Guideline on the portrayal of VTS information and data (both operational and technical aspects)	25
10.2	Task 2.1.2 Develop a Recommendation and Guideline on Cyber-Security in AtoN operations (lead by ARM, all Committees via Workshop)	25
10.3	TASK 2.2.0 Consider relevant VTS documents to be revised/updated next WP	25
10.4	Task 2.2.1 Review and update Recommendation V-128 on Operational and Technical Performance of VTS Systems	25
10.5	Task 2.2.2 Review and update Guideline 1111 on Preparation of Operational and Technical Performance Requirements for VTS Systems	26
10.6	Task 2.3.1 Develop a Product Specification under the S-100 framework for VTS	27
10.7	Task 2.3.2 Review and update Recommendation R0145 (V-145) on the Inter-VTS Exchange Format (IVEF) Service	27
10.8	TASK 2.7.1 Update G1130 (Technical aspects of information exchange between VTS and allied or other services) to include cyber-security considerations	27
11.	WORKING GROUP 3 – VTS Personnel and Training (WG3)	27
11.1	Develop Guidance on Human Factors in VTS (Task 3.1.1)	27
11.2	Review and update Recommendation R0103 on the Standards for Training and Certification of VTS Personnel and associated Model Courses (Task 3.3.1)	28
11.3	Proposed work items for IALA Work Term 2023-2027	29
11.4	Additional Document Review	29
12.	Any other Business	30
13.	Summary of output and working papers	30
14.	Review of session report	30
15.	Date and venue of next meetings	30
16.	Closing of the Meeting	31
17.	List of Annexes	31
ANNEX A	VTS52 Committee Agenda	32
ANNEX B	List of participants	34
ANNEX C	List of input papers	39
ANNEX D	List of Output Documents and Working Papers	44
ANNEX E	Action Items	46

Report of the 52nd session of the IALA Vessel Traffic Services (VTS) Committee

1. INTRODUCTION

The 52nd meeting of the VTS Committee was held from 30 March – 13 April 2022 virtually with Monica Sundklev as Chair and Dirk Eckhoff as Vice-Chair. The Secretary for the meeting was Thomas Southall.

155 participants from 30 countries, three Sister organisations participated in VTS52. 18 participants attended for the first time. A breakdown of the participants is shown in the graph below.



1.1 Welcome from the Secretary-General

Francis Zachariae, Secretary-General of IALA welcomed all participants to VTS52, he stated:

“I would like to welcome you to VTS52, which is hopefully the last virtual meeting of the COVID pandemic. More and more countries have lifted or are in the process of lifting the restrictions and it seems like the virus is getting weaker and allow us to live a normal life.

The Secretariat have started normal work routine in the HQ and travels are starting to fill up the agendas again.

So hopefully we will all be together at the next round of committee meetings, but of course with a possibility to participate online if travel is not an option. But we do recommend meeting f2f as soon as possible.

I see you have a very busy schedule for this meeting with a lot of interesting input documents and a lot of work to finish from previous meetings.

I have noted with special interest the many papers on MASS and the future of VTS. The future of VTS is very important and probably VTS will change and have new tasks as the Maritime sector develops. See for instance the STM paper from Sweden. The new resolution takes that into account and is future proof. MASS is taking more and more time and is becoming truly cross committee work.

The papers are a nice mixture of these future visions and basic VTS requirements like Language skills, human factor ergonomics and work on the good old V103. Also, many interesting papers on Quality management. I must thank the Chinese MSA and the Korean Coast Guard who have been very productive and posted many papers for the session. Good luck – there will not be much spare time.

As you probably know we hosted a very successful signing ceremony on the new IALA IGO convention. Never has St. Germain en Laye seen so many big black Mercedes with ambassadors from all over the world. A fantastic day and with the great result, that 51 States have now signed the Convention. When 30 States have ratified, accepted or acceded to the Convention, IALA will be an IGO. That could happen within the next few years, so we need to be prepared. The Secretariat is working on all the new structures and administrative issues that need to be in place for the new Organization.

We thought that things should be normal now after the COVID pandemic, but an even more serious situation is now a reality. We have war in Europe and at this difficult time our thoughts are with our friends and their families and the people of Ukraine.

At times like this, it reminds me that we are privileged to work for an organisation that seeks to bring people together in a spirit of cooperation and compromise, and where understanding and mutual respect are so important. The international institutions and global corporation have again proven to be very important.

I wish you good luck with the meeting and thank you for all the work you are doing in the well-known spirit of the IALA family.”

1.2 Approval of the agenda

The agenda was reviewed and approved (VTS52-1.2.1).

1.3 Apologies

The Chair welcomed the new participants of the Committee. No apologies for absence had been received by the Secretariat. A list of participants who attended VTS52 can be found on IALA Dashboard for VTS.

1.4 Working Arrangements

The following statement on the IALA General Data Protection Policy was made by the Committee Secretary:

IALA complies with the General Data Protection Regulations of the European Union. IALA will include a list of participants with their contact information in the report of this meeting. Any participant who wishes to remove their contact details from the participants list should advise the Committee Secretary as soon as possible.

The following question was asked by the Committee Secretary:

If anyone present has knowledge of any patents, including pending Patents, held either by themselves or by other organisations or individuals, the use of which may be required to practice or implement the content of IALA Documents being developed or worked on in this Committee to inform the IALA Secretariat.

No patents were noted.

The Committee Secretary provided all participants with a briefing on the *Virtual Committee Working Arrangements* document and tools available to them. This brief included an overview of the tasks, in the form of the VTS52 Action Plan that had been agreed by the VTS Committee Management Team to be progressed during

VTS52 through virtual Task Groups (TG). Each task had a deadline for expressions of interest to participate to the specified Task Group Leader by a certain date. Timings of the TG meetings were arranged by each Task Group Leader in liaison with the Secretariat and displayed on a committee dashboard calendar.

Task items that were worked on at VTS52 were displayed in the *Action Plan*, which can be found on IALA Dashboard for VTS.

The deadline for submitting documents to the silent approval procedure was set to 8 April 2022 at 10:00 UTC.

2. REVIEW OF ACTION ITEMS FROM VTS51

The Committee Secretary confirmed that all Secretariat and participant actions from VTS51 were completed (input paper VTS52-2.1.1).

3. REVIEW OF INPUT PAPERS

The input papers for VTS52 consisted of new input papers as well as working papers from the previous session. As a trial, the input paper list (VTS52-3.1.1) did not include the working papers from VTS51. This is in order to aid participants to see only new inputs. The working paper list (VTS52-3.1.2) was a separate input document.

3.1 Input papers to VTS52

Input papers were noted as listed in VTS52-3.1.1.

The Chair informed about late and very late input papers to VTS52, which were due to the fact that the start order of the committee meetings were temporarily changed during the spring and VTS was the last committee to begin.

3.2 Input papers not related to an existing task

The Chair highlighted a number of papers, these included:

Document	Comment
VTS52-3.2.1 ENG Liaison note on proposals for enhancing environmental sustainability	The Committee noted the input paper from ENG on sustainability and the Chair emphasized that sustainability should be considered by the whole Committee when developing guidance on VTS.
VTS52-3.2.4 ARM Liaison Note to ENAV and VTS -Technologies to Support Maritime Single Window + ARM15 report	The Committee noted the liaison note from ARM14 where contributions from both the ENAV and VTS Committees were appreciated and that work on edition 2 on G1159 <i>Ship Reporting from a Shore-Based Perspective</i> would commence. The Committee also noted the report of ARM15, which was finalized on 25 March 2022, where a decision had been taken not to do any work on the second edition of G1159 (task 5.2.2) for the remainder of this work period and that further clarification from Council was needed.
VTS52-3.2.5 Liaison note to all committees on Recommendation R1001 The IALA Maritime Buoyage System (MBS) Edition 2 (ARM14-11.2.1.1)	The Committee noted the liaison note from ARM 14 and that relevant suggestions from VTS51 had been considered and incorporated as appropriate. The Committee wishes ARM good luck with the final work of the MBS.

<p>VTS52-3.2.6 Liaison note to all committees on sustainability workshop (ENG15-12.0.1)</p>	<p>The Committee welcomed ENG's proposal of a workshop on sustainability in the provision on AtoN but proposed that the title should be clearer to emphasize that AtoN also includes VTS and other IALA issues.</p> <p>At the opening plenary, the Chair asked if any participant had experience from both IALA procedures and workshop preparations as well as having practice on working with sustainability and the UN sustainable goals. There were none and for the time being the Chair will be representing the VTS Committee at the workshop steering committee. These comments will be passed on directly to the ENG Chair and the rest of PAP46.</p>
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4. REPORTS FROM OTHER BODIES

4.1 IALA

4.1.1 IALA Council

The 74th session of the IALA Council was held virtually from 13 to 17 December 2021 by videoconference. Technical Manager, Minsu Jeon, highlighted the approved documents and points of interest of the VTS Committee.

The report highlighted that:

- Strategy Drafting Group meeting was held on 13 December 2021
- KRISO Technical cooperation on MRN MOU signing ceremony was held on 16 December 2021
- Council workshop on MASS was held 16 December 2021
- 17 new and revised technical documents were approved including 12 guidelines, 2 recommendations and 3 model courses
- Withdrawn IALA Recommendation R0200 overview of E-200 series (E-200-0).
- Update to VTS documentation on the adoption of revised IMO resolution A.1158(32)
- Update of the current drivers and trends
- Approved the revised committee workshop programme for 2023 - 2027
- Input paper on AIS ASM survey

4.1.2 IALA Policy Advisory Panel

The 44th session of PAP was held virtually over three sessions held between 08 - 10 February 2022.

Key outcomes included:

- The draft recommendation and guideline on MASS currently being developed by ENAV should be jointly developed cross-committee with each committee authoring different topics within them, with ENAV being the committee ultimately responsible for its development. This does not affect the committees' individual tasks currently underway.
- The PAP encouraged an abstract on sustainability should be submitted to be delivered at the IALA Conference and a future workshop or seminar should be planned in the future.
- The PAP also proposed that ENG committee consider a workshop on sustainability in the provision of AtoN.

- There will be an inter-committee task group working on maritime services, that will consider many issues surrounding this topic, such as:
 - Merging MS 1, 2 and 3 (VTS)
 - Develop a new MS on AtoN incl. PNT (ARM)
 - Develop an IALA guideline on MS (ARM)
 - To highlight to IMO the inconsistencies that have become apparent in the period since the MSC.1/Circ.1610 Circular was first approved.

Output from this group will be circulated to all committees and an update submitted to NCSR 9 to inform IMO of the work of IALA in this area. The deadline for submission to IMO for small papers of less than 6 pages is 18th April 2022.

- That the ENAV Committee develop a proposal for a workshop on digital maritime radiocommunication and submit it to Council for consideration.

The Deputy Secretary-General, Omar Frits Eriksson was invited to report on PAP's response on VTS Committee Liaison Note to PAP on IALA Standards incl. Annex (VTS51-13.1.0.3). He mentioned that PAP concluded the following:

- Fundamental change, such as:
 - inclusion of model courses and manuals, which could change the hierarchy of IALA documents;
 - having an overarching standard; and
 - complying with all or part of a standard.

should be considered later when IALA becomes an IGO and not before.

- Only recommendations are normative or informative. Guidelines can never be normative as they are a broad description of possible ways you may fulfil the provisions of a recommendation.
- The VTS Manual and any other IALA documentation should be amended to reflect that only recommendations are normative or informative.
- Any content that is currently in a guideline that is considered more than just guidance, should be considered moved into a recommendation (for instance VTS communications or the content of Guideline G1089) as guidelines should only contain information on how to fulfil a recommendation.
- Use of the words 'shall or should' in IALA documentation should be considered clarified for instance in the Style Guide.

The VTS Committee noted the Deputy Secretary-General's report.

4.2 IMO

Minsu briefed the Committee on the programme of IMO for this year and pointed out the topics of interest as depicted below.

Date	Meeting	Type	Topics
7 – 11 February	SUB-COMMITTEE ON HUMAN ELEMENT, TRAINING AND WATCHKEEPING (HTW) – 8th session	Remote meeting	• STCW
20 – 29 April	MARITIME SAFETY COMMITTEE (MSC) – 105th session	TBC	• MASS
9 – 13 May	FACILITATION COMMITTEE (FAL) – 46th session	TBC	• Compendium, MSW
16 – 20 May	6th meeting of the Expert Group on Data Harmonization	TBC	• Data elements
21 – 30 June	SUB-COMMITTEE ON NAVIGATION, COMMUNICATIONS AND SEARCH AND RESCUE (NCSR) – 9th session	TBC	• Maritime service • SOLAS, GMDSS • PS for satellite receiver • ITU • ECDIS
25 – 29 July	SUB-COMMITTEE ON IMPLEMENTATION OF IMO INSTRUMENTS (III) – 8th session	TBC	• IMSAS
2-11 Nov	MARITIME SAFETY COMMITTEE (MSC) – 106th session	TBC	

4.3 IHO

The joint IALA / IHO workshop on S-100/200 will take place 5 – 9 September in Norway.

The sixth IALA/IHO technical cooperation meeting was held on 26 Nov 2021. The meeting discussed how to harmonize the terms and definitions of Marine Aids to Navigation and portrayal of IALA related product specifications. It was a good chance to exchange the development status of the product specifications.

Domain	PS	Title	Developer	Version
Positioning	AtoN S-201	AtoN information	ARM	1.0.0
	S-240	DGNSS almanac	ENG	1.0.0
	S-245	eLoran ASF	ENG	1.0.0
	S-246	eLoran almanac	ENG	1.0.0
	S-247	eLoran reference stations	ENG	1.0.0
Comms.	S-230	Application Specific Message (ASM)	ENAV	Planned
VTS	S-210	Inter VTS exchange	VTS	Started
	S-211	Port Call Message	IPCDMC	1.0.0
	S-212	VTS digital information service	VTS	0.6.4

Minsu reported the result of IHO GI Registry Domain Control Body (DCB) workshop which was held on 3 Feb 2022. The event was a training event and summarized the roles and responsibilities of the DCB.

4.4 ITU

Minsu Jeon informed on IALA / ITU matters including a report from Stefan Bober. He highlighted the work surrounding VDES and AIS and anticipated input from IMO NCSR which may trigger the revision of the ITU AIS standard.

5. REPORTS FROM RAPORTEURS

5.1 MASS related to VTS

Rapporteur: Neil Trainor

Since VTS51, the TG1.2.5 has focused on reviewing/updating *Section 3.4 – Embracing and Influencing the development of MASS*, as a means, to facilitate strategically planning for MASS and ensure VTS continues to contribute to safety of life at sea, safety and efficiency of navigation and the protection of the environment within the VTS area by mitigating the development of unsafe situations, noting:

- The proposed preparation of a road map, including scope, steps, and timelines for detailed consideration at MSC 105;
- Endorsement of a new output “Development of a goal-based instrument for maritime autonomous surface ships (MASS)”, in the outputs of MSC for the 2022-2023 biennium, with a target completion year of 2025; and
- The VTS Committees view at VTS51 that preparation of guidance material should continue to be paused.

Key changes to *Section 3.4 –Embracing and Influencing the development of MASS*, include:

- **Case Studies** – The ongoing use of ‘Case Studies’ to assist gaining a greater understanding of MASS and its implications by monitoring their development/outcomes and identifying opportunities for involvement/engagement is a key element and the ‘Case Studies’ document has been updated and can be download from - <https://www.iala-aism.org/technical/mass/>
- **Discussion Paper** – The paper has been reviewed and updated to assist the Committee achieve a common understanding of MASS and its implications on the provision of VTS by clearly and concisely identifying:
 - Trends and opportunities presented by MASS.
 - Issues / challenges for the management of ship traffic in a VTS area.
 - Options, policies, and strategies for VTS to embrace / influence MASS.
 - Implications for the regulatory and legal framework for VTS.
 - Implications for IALA Standards relating to VTS.

The Group was also of the view that the VTS Committee should forward the Discussion Paper to ENAV for their comment/input.

A copy of the Discussion Paper is at *VTS52-9.2.1.1 WP TG.1.2.5 Discussion paper - Implications of MASS from a VTS Perspective*.

- **Position Paper** – The Group is of the view that preparation of a concise ‘Position Paper’ to communicate the Committee’s opinion and intentions on key considerations / operational requirements for the management of ship traffic to ensure the safety and efficiency of ship movements by mitigating the development of unsafe situations with a mix of conventional and autonomous ships, VTS and RCCs.

While this will assist the Committee, it may also assist members and IALA to engage with the IMO’s consideration of a mandatory instrument regarding MASS.

Items being considered for a “Position Paper’ include, for example:

- What’s required to manage ship traffic and the interactions between conventional and autonomous ships, VTS and RCC’s, including any gaps.
 - Standards for digital communications, both autonomous and conventional ships
 - The role of VTS and interaction with RCC’s and autonomous ships
- **IALA Policy Documents** - Key documents associated with the *IALA Strategic Vision 2018-2026* should be regularly reviewed by the VTS Committee with a view to recommending updates to reflect the advent of MASS and provide the policy framework to facilitate embracing these developments, including:
 - *Position on the Development of Marine Aids to Navigation Services 2019*
 - *Current Drivers and Trends*
- **Fast Tracking Adoption of New/Revised IALA Guidance** - Two new Tasks already adopted:
 - Ensuring VTS Guidance Documents evolve with the Advent of MASS.

- Digital VTS Communications.
- **Greater IALA Engagement with MSC and FAL**

Section to be developed.

The Group is also of the view that consideration be given to holding a joint ‘brain storming’ session between the ‘Future VTS’ and ‘MASS’ Task Groups at VTS52 to explore ‘operational requirements’ for VTS to provide ‘ships’ with information on factors that may influence ship movements and assist ‘onboard decision-making’ by digital communications / data exchange and to manage ship traffic.

Note: ‘ship’ – refers to conventional and autonomous and ‘onboard decision-making’ refers to the “responsible entity” for the ‘ship’

No amendments are proposed to the following documents from VTS51:

- The contents in 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*)..

5.2 VTS questionnaire coordination group

Rapporteur: Neil Trainor

The Chair informed that there is a recent initiative from the Secretariat on developing an IALA questionnaire and one meeting with ARM and VTS has been conducted. Further information is to come.

5.3 e-Nav operational service description

Rapporteur: Fredrik Karlsson

Due to technical communication problems, the connection with Fredrik was disrupted and the information should be sent to the committee participants separately.

5.4 IALA NAVGUIDE

Rapporteur: Jillian Carson-Jackson

Minsu Jeon, Technical Operations Manager reported that all inputs had been received from the various committees. The Secretariat are now in the process of formatting the document to ensure consistency across all sections.

6. PRESENTATIONS

All recordings of the presentations given at VTS52 can be found at IALA Dashboard for All Committees under Resources / Committee Presentations (login necessary). The following presentations were given at VTS52:

- IALA World Wide Academy Update / Kevin Gregory, IALA
- IALA Dictionary Procedures / Minsu Jeon, IALA
- Implementing STM Tools into VTS Operations and Standard Operational Procedures / Anders Johannesson, SMA
- VTS in China’s Inland Waterways / Feng Xue, China MSA
- IVEF Update / Sangwon Park, KMI

7. WORK PROGRAMME 2018-2023

7.1 VTS Task Plan and Task Register for VTS52

An updated Task Plan pre-VTS52 was noted by the Committee. The Committee Management Team made further updates to the Task Plan (VTS52-13.2.0.1), considering the developments during VTS52, and which will be forwarded to VTS53.

A Task Register on the tasks to be worked on during the Work Programme 2018-2023 was updated by the VTS Vice-chair, Dirk Eckhoff.

Action item:

The Secretariat is requested to forward the updated Task Plan (VTS52-13.2.0.1) and Task Register (VTS52-13.2.0.2) to VTS53.

7.2 Action Plan for VTS52

The VTS52 Action Plan, which can be found on IALA Dashboard for VTS, was noted by the Committee.

7.3 VTS tasks for Work Programme 2023 – 2027

The new task register for the next Work Programme (WP) will, beside the tasks that are being carried over from this WP, include the new tasks which are provided in the new template format for the next working period.

The Chair urged that any task proposals should be accompanied by a full entry for the Task Register using the updated template which can be found on the IALA file-share.

The tasks for the next working period will be processed intersessionally by the Committee Vice-Chair. Furthermore PAP will coordinate the tasks of all Committees, identify cooperation and lead on relevant tasks and allocate them in the IALA Work Programme for period 2023-27.

Action item:

That the Secretariat forward the WP Provisional 2023 – 2027 Task Plan (VTS52-13.2.0.3) to VTS52 as a working paper.

The Vice-Chair is requested to process the new tasks and provide an updated VTS Task Plan for 2023-2027 to VTS52.

8. ESTABLISH WORKING GROUPS

The Chair outlined the procedure to be followed by working groups, including the associated paperwork and description of IALA secretary support, after which three working groups were established and their tasks outlined. The Working Group Chairs and Vice-Chairs were introduced.

Working Group (WG)	Working Group Chair / Vice-Chair
WG1 – Operations	Trond Ski (Chair), Els Bogaert (Vice-chair)
WG2 – Technology	Richard Aase (Chair), Robert Townsend (Vice-chair)
WG3 – VTS Training	Jillian Carson-Jackson (Chair), Stefaan Priem (Vice-chair)

9. WORKING GROUP 1 – OPERATIONS (WG1)

Around 50 individual participants attended at least one of the Task Group meetings formed under Working Group 1 - Operations during VTS52.

Working group 1 progressed all five remaining tasks assigned under the 2018 - 2023 Work Programme. Intersessional work is planned to further progress four of the five remaining tasks.

9.1 REVIEW OF INPUT PAPERS

The Chair highlighted a number of papers, these included:

- VTS52-3.2.3 liaison note from the ARM Committee on the revised Guideline G1052 Quality Management Systems for AtoN Services Delivery.
- VTS52-9.1.1, 9.1.1.1 and 9.1.1.2 papers from WWA on updating Recommendation R0119 Establishment of a VTS and Guideline G1150 Establishing Planning and implementing a VTS.

The VTS Committee noted input paper VTS52-9.1.1 and related documents VTS52-9.1.1.1 and VTS52-9.1.1.2 from WWA and thanked WWA for their proposal and valid inputs to *Recommendation R0119 Establishment of a VTS* and *Guideline G1150 Establishing Planning and implementing a VTS*. The VTS Committee conducted a further review and updated both the recommendation and guideline which were forwarded to the Council for approval.

Action item(s):

The Secretariat is requested to forward the Liaison Note to ARM on the revised Guideline G1052 Quality Management Systems for AtoN Services Delivery (VTS52-13.1.1.1) for their consideration.

The Secretariat is requested to forward the updated Recommendation R0119 Establishment of a VTS (VTS52-13.1.1.2) and the updated Guideline G1150 Establishing Planning and implementing a VTS (VTS52-13.1.1.3) to Council for approval.

9.1 Task 1.2.4 - Develop a Guideline on Maritime Services in the context of e-Navigation relating to VTS

Task group leader: Tuomas Martikainen

The following input papers were considered in connection with Task 1.2.4:

- VTS52-13.3.1.1 WP draft description of Maritime Services 1 – VTS
- VTS52-13.3.1.2 WP Draft Guideline on Maritime Services
- VTS52-13.3.1.3 WP Appendix 1 MS1-3

At VTS52 the task group finalized a draft amalgamation of the current three Maritime Service descriptions on VTS (MS 1-3) into one single Maritime Service (MS1) to align with the new IMO Resolution on VTS.

The description of 'MS 1 - Vessel Traffic Service' can be used as part of the IALA's proposal to IMO to amend MSC.1/Circ.1610 'Initial descriptions of Maritime Services in the context of e-navigation'. It is expected that IALA will submit this proposal to NCSR 10 in 2023 together with a new MS on AtoN.

The group also noted that the expected outcome of the task in the Task Register is '*to provide input to ARM for the update of sections MS 1-3 in the draft guideline on Maritime Services*'. Information received from the task leader in ARM was that there is currently no work done to develop an IALA guideline on maritime services. The expected outcome of the task was updated accordingly to '*To provide input to IALA submission to IMO for update of sections MS 1-3 in MSC.1/Circ.1610.*'

Action item(s):

The Secretariat is requested to forward the draft description of Maritime Service 1- Vessel Traffic Service (VTS52-13.1.1.4) to PAP for inclusion in the IALA's submission for the update of MSC.1/Circ.1610.

The Secretariat is requested to forward the WP Draft Guideline on Maritime Services (VTS52-13.2.1.1) and WP Appendix 1 MS1-3 (VTS52-13.2.1.2) as working papers to VTS53 for further development.

9.2 Task 1.2.5 - Develop guidance on the Implications of Maritime Autonomous Surface Ships (MASS) from a VTS Perspective

The following input papers were considered in connection with Task 1.2.5:

- VTS52-9.2.1 Input Paper - Output from TG-1.2.5 -Implications of MASS from a VTS Perspective
- VTS52-9.2.1.1 WP TG.1.2.5 Discussion paper - Implications of MASS from a VTS Perspective
- VTS51-9.2.9 WP TG-1.2.5 Guiding Principles (VTS50-13.3.1.5)
- VTS51-7.1.2 WP VTS Task Register 2018-2022 - Rev2 (2021-03-31) (VTS50-13.3.0.2)

Key outcomes include:

- 1) **Joint session between TG-1.2.5 'MASS' and TG-1.4.3 'Future VTS'** - A joint meeting between TG1.2.5-Implications of MASS from a VTS Perspective and TG1.4.3-Future VTS was held to explore 'operational requirements' for managing ship traffic and the interaction between VTS, ships (both conventional and autonomous), allied services and RCCs through mix of traditional VHF voice, digital communications, and automated data exchange.

Highlights from the joint session include:

- *A key principle in transitioning to a digital environment is ensuring the intent of messages conveyed to actors, including allied services, is the same, irrespective of the technology used to deliver it (e.g., voice/digital/automated data exchange).*
- *The principles of many of today's reporting requirements / interactions will still be required (e.g., entry report, permission to proceed, route deviation) in transitioning, however the contents, details and method of delivery will evolve. The concepts of handshaking / confirmation associated with responsibilities / expectations will remain.*
- *There is a compelling need for a global standard for digital communications and automated data exchange to ensure a successful transition to a digital maritime world and managing ship traffic comprising both conventional and autonomous ships. Specifically, this includes structure, format syntax and the defined elements.*
- *The transition to digital communications and automated data exchange offers opportunities for more efficient interaction / transfer of information and data to minimise the burden on the entity responsible for the navigation of the ship in transiting VTS areas and between VTS areas.*
- *As the transition commences there is a compelling need to explore and adopt strategies to:*
 - *Ensure a global standard for digital communications and automated data exchange is achieved.*
 - *Ensure the requirements to manage ship traffic in the changing environment are clearly and concisely articulated and communicated.*
 - *Consider and define automation at a VTS to enable the management of a mix of traditional VHF voice, digital communications, and automated data exchange between shore and 'ship', allied services, RCCs and other stakeholders.*
 - *Consider possible changes to the role / function for VTS and other services.*
- *As we transition from the traditional means of vessel navigation, management of ship traffic and communications, to more highly automated means of voyage planning, digital data exchange, and MASS, it is recognized that the role of human operators will change.*
 - *The success of future operations within this evolving marine ecosystem will require building trust between human operators and the new levels of automation. It will therefore be essential that new roles, tasking, and work process defined for human operators include methods for building trust during the development, testing and deployment of MASS and other highly automated systems.*
- *There is a rapidly emerging need for the VTS community and IALA to engage in the change process occurring and the development of the road map for MASS commencing at the IMO to communicate the functional / operation requirements to manage ship traffic and the interaction between VTS,*

ships (both conventional and autonomous), allied services and RCCs through mix of traditional VHF voice, digital communications, and automated data exchange.

The report from the joint session is at *VT552-13.2.1.5 WG1 - Report from TG1.2.5 and TG1.4.3 Joint Session*.

- 2) **Discussion Paper** – Minor amendments to the Discussion Paper were made to reflect the development of a goal-based instrument for MASS to be considered at MSC105 (MSC 105/7) (see Section 3.1.1 IMO Framework).

A copy of the revised Discussion Paper is at *VT552 WP TG.1.2.5 Discussion paper - Implications of MASS from a VTS perspective (as at VT552)*.

- 3) **Preparation of Guidance** – No further work was undertaken on the preparation of guidance noting the Committee's view at VT551 that preparation of guidance material as part of Task 1.2.5 should continue to be paused, recognizing:
 - The draft road map for the development of a goal-based instrument for MASS to be considered by the IMO Maritime Safety Committee at MSC105 (MSC 105/7).
 - The development of the Discussion Paper.
 - The consideration of 'Case Studies'.
 - Existing guidance available for MASS trials such as:
 - The IMO Interim Guidelines for MASS Trials (MSC.1/Circ.1604).
 - EU Operational Guidelines for Safe, Secure and Sustainable Trials of Maritime Autonomous Surface Ships (MASS).
 - MASS UK Industry Conduct Principles and Code of Practice.
- 4) **Guiding Principles** – No changes were proposed to the Guiding principles (*VT551-13.3.1.6 WP TG-1.2.5 Guiding Principles*).
- 5) **Task register** - No changes were proposed to the Task Register.

It was also agreed:

- The Discussion Paper and the report from the joint session should be forwarded to the other IALA Committees and the IALA Task Force for their information and comment.
- Intersessional work on Task 1.2.5 should continue between VT552 and VT553 to progress the task and review the outcomes from MSC105 and the joint TG1.2.5 / TG1.4.3 session (VT552-13.2.1.5) for consideration at VT553.

The Intersessional task group working on the development of guidance on the implications of MASS from a VTS perspective is requested to prepare the following for the Committee's consideration at VT553 with a view for forwarding to Council:

- *An updated Discussion Document for consideration at VT553, and*
- *A draft high-level brief on the implications of MASS from a VTS perspective, focussing on:*
 - *The operational considerations for managing ship traffic and the interaction between VTS, ships (both conventional and autonomous), allied services and RCCs through mix of traditional VHF voice, digital communications, and automated data exchange.*
 - *How to communicate these to stakeholders and engage in the development of the road map being considered by MSC for the development of a goal-based instrument for MASS.*
 - *Opportunities for engaging in the development of the road map being considered by MSC for the development of a goal-based instrument for MASS.*

Action item(s):

The Secretariat is requested to forward the following documents to the other committees and the MASS Task Force for their information and comment: VT552-13.1.1.5.1 WP TG.1.2.5 Discussion paper - Implications of MASS from a

VTs perspective (as at VTS52; VTS52-13.1.1.5.2 WG1 - Report from TG1.2.5 and TG1.4.3 Joint Session; and a draft liaison note to accompany the documents (VTS52-13.1.1.5 Liaison note re TG1.2.5).

The Secretariat is requested to forward VTS52-13.2.1.3 WP TG-1.2.5 Guiding Principles, VTS52-13.2.1.4 WP TG.1.2.5 Discussion Paper - Implications of MASS from a VTS perspective (as at VTS52) and VTS52-13.2.1.5 WP WG1 - Report from TG1.2.5 and TG1.4.3 Joint Session as working papers to VTS53.

The Committee participants are invited to join the intersessional task group working on the development of guidance on the implications of MASS from a VTS perspective and to express their interest to Neil Trainor (neil.trainor@amsa.gov.au) by 30 April 2022, noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard.

The Intersessional Task Group Leader to provide input on the intersessional work on task 1.2.5 to VTS53.

9.3 Task 1.2.6 - Develop a Guideline on how to develop a safety culture in VTS

Task group leader: Trond Ski

The following input paper was considered in connection with Task 1.2.6:

- VTS52-13.3.1.7 WP draft Guideline on Safety Culture

At VTS52 the task group progressed the work on the draft guideline based on a discussion paper kindly provided by China MSA during the session. The draft guideline was updated with text on the recognized elements of safety culture and the assessment of safety culture. Furthermore, the provision of references to the IALA guidance most relevant to the development of safety culture was included.

The task group plan to continue the review by correspondence, inviting participants of the IALA VTS Committee to join a correspondence group and further to provide intersessional comments and remarks to the draft guideline on Safety Culture. This may be done through a questionnaire kindly provided by China MSA, available at the IALA file-share.

Action item(s):

The Secretariat is requested to forward the WP draft guideline on Safety Culture (VTS52-13.2.1.6) as a working paper to VTS53 for further development.

The Committee participants are invited to submit comments and remarks on the WP draft guideline on Safety Culture (VTS52-13.2.1.6) and to express their interest to join an intersessional correspondence group to Trond Ski (trond.ski@kystverket.no) by 30 April 2022. Input to the draft guideline may be provided using a questionnaire found at the IALA file-share under the VTS52/WG1/TG 1.2.6 folder.

The Intersessional Task Group Leader to provide input on the intersessional work on task 1.2.6 to VTS53.

9.4 Task 1.3.2 - Develop guidance on VTS Digital communications (operational aspects)

Task group leader: Tuomas Martikainen

The task group commenced the work to develop guidance on VTS Digital Communications based on the task description from VTS51. The purpose of the new Guideline is to specify how to implement the practices associated with Recommendations R0127 - VTS Operations and R1012 - VTS Communications for the interaction between VTS and ships by digital means. The group discussed the high level principles for the content and structure of the new guideline. It was agreed that the Guideline could have similar structure as the G1132 'VTS voice communications and phraseology'.

Action item(s):

The Secretariat is requested to forward the WP draft Guideline on VTS Digital Communications (VTS52-13.2.1.7) as a working paper to VTS53 for further development.

Tet Committee participants are invited to join the intersessional task group working on the development of guidance on VTS Digital Communications and to express their interest to Tuomas Martikainen (tuomas.martikainen@vayla.fi) by 30 April 2022, noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard.

The Intersessional Task Group Leader to provide input on the intersessional work on task 1.3.2 to VTS53.

9.5 Task 1.4.3 - Prepare a “living document” on “Future VTS”

Task group leader: Neil Trainor

The following input papers were considered in connection with Task 1.4.3:

- VTS52-9.6.1 Input Paper - Output from TG-1.4.3 - Future VTS
- VTS52-9.6.1.1 WP Task 1.4.3 Future VTS Discussion Paper (Input to VTS52)
- VTS52-9.6.2 INFO Paper (Proposal for an Abnormal Situation Detection System using Big Data) Korea Coast Guard
- VTS51-7.1.2 WP VTS Task Register 2018-2022 - Rev2 (2021-03-31) (VTS50-13.3.0.2)
- VTS51-9.6.3 WP Guiding Principles - Future VTS

Key outcomes include:

1) Joint session between TG-1.2.5 ‘MASS’ and TG-1.4.3 ‘Future VTS’ -

The outcomes from the joint session are provided in Section 9.2 above.

The report from the joint session is at VTS52-13.2.1.5 WG1 - Report from TG1.2.5 and TG1.4.3 Joint Session.

2) Discussion Paper – A review of the Discussion Paper (VTS52-9.6.1.1 WP Task 1.4.3 Future VTS Discussion Paper (Input to VTS52)) highlighted the document has matured with the intersessional work since VTS51. In particular:

- Aligning the document with the new IMO resolution for VTS and the purpose of VTS.
- Aligning the document to IALA Strategic Vision and Current Drivers and Trends.
- Development of the expectations.
- Development of the new section - Section 4.2 - Realising Expectations - to explore ‘How we get there’, ‘what is needed’ in moving to ‘future VTS’.
- Rearrangement of the document to improve readability

The review also highlighted that further consideration should be given to:

- Emerging trends, technologies, and practices other than MASS, digital technologies and communications and Automated Data and Information Exchange
- The contribution of VTS to protection of the environment associated with the emerging trends, technologies, and practices.
- Further developing the ‘Expectations’ to reflect all the emerging trends, technologies, and practices as appropriate. That is, are the expectations a currently described broad enough to reflect all the developments being considered?
- Grouping/merging some of the thirteen contributing practices, technologies, and trends.

A copy of the revised Discussion Paper is at VTS52-13.2.1.8. WP Task 1.4.3 Future VTS Discussion Paper (as at VTS52).

3) Guiding Principles – No changes were proposed to the Guiding principles (VTS50-13.3.1.8 WP Guiding Principles - Future VTS (1.0)).

4) **Task register** - No changes were proposed to the Task Register.

It was also agreed:

- The Discussion Paper should be forwarded to the other IALA Committees for their information and comment.
- Intersessional work on Task 1.4.3 should continue between VTS52 and VTS53 to focus on:
 - An updated Discussion Document for consideration at VTS53
 - Emerging trends, technologies, and practices other than MASS, digital technologies and communications and Automated Data and Information Exchange
 - The contribution of VTS to protection of the environment associated with the emerging trends, technologies, and practices.
 - Developing the 'Expectations' to reflect all the emerging trends, technologies, and practices as appropriate. That is, are the expectations a currently described broad enough to reflect all the developments being considered?
 - Grouping/merging some of the thirteen contributing practices, technologies, and trends.
 for consideration at VTS53.

As part of its intersessional work, the task group prepare a draft high-level brief on 'Future VTS' for the Committee's consideration at VTS53 with a view for forwarding to Council.

Action item(s):

The Secretariat is requested to forward VTS52-13.1.1.6.1 WP Task 1.4.3 Future VTS Discussion Paper (as at VTS52), and a draft liaison note to accompany the documents is at (VTS52-13.1.1.6 Liaison note re TG1.4.3) to the other committees for their information and comment.

The Secretariat is requested to forward VTS52-13.2.1.9 WP Task 1.4.3 Future VTS Discussion Paper (as at VTS52) and VTS52-13.2.1.10 WP TG-1.2.5 Guiding Principles as working papers to VTS53.

The Committee participants are invited to join the intersessional task group working on 'Future VTS' and to express their interest to Neil Trainor (neil.trainor@amsa.gov.au) by 30 April 2022, noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard.

The Intersessional Task Group Leader to provide input on the intersessional work on task 1.4.3 to VTS53.

9.6 Task 1.4.1 Updates to the VTS Manual

Task group leader: Neil Trainor

This task is a continuous task to be managed at each Committee session.

Action item:

The Secretariat is requested to suggest amendments in accordance with PAP44 to the VTS Chair and TGL of the VTS Manual to reflect that only recommendations are normative or informative (see also agenda item 4.1.2).

10. WORKING GROUP 2 – TECHNOLOGY (WG2)

The Chair and Vice-chair held an initial plenary session for participants of the Technology Working Group and this was followed by a mid-way plenary and a final plenary during the course of VTS52 to monitor progress and set expectations.

The Technology Working Group has eight formal tasks assigned in the current Work Period. During VTS52, progress was made on three tasks (2.1.1, 2.2.2 & 2.3.1).

Post-VTS52 Intersessional work must be completed and all documents submitted to the Secretariat before 11 July 2022 in order that the editorial and style guide amendments may be made before they are inputted to VTS53 for members to read and to be sent for approval at the start of VTS53.

10.1 Task 2.1.1 Develop a Guideline on the portrayal of VTS information and data (both operational and technical aspects)

This task is near complete however after review by CMT, a reference to G1105 is required and additional intersessional work will be carried out. It is intended that the draft Guideline will be finalized at VTS53.

The liaison note from ARM on G1105 (VTS52-9.2.2) will be further discussed at VTS53.

Action item(s):

That the Secretariat forward the working paper on draft Guideline on the portrayal of VTS information and data (VTS52-13.2.2.1) to VTS53 for further consideration.

That the Secretariat forward the WP liaison note from ARM on Guideline G1105 (VTS52- 13.2.2.2) to VTS53 for further consideration and response to ARM.

The Committee participants are invited to join the intersessional task group working on the draft Guideline on the portrayal of VTS information and data and to express their interest to Peter Kito (peterkito@jrcamerica.com) by 30 April 2022, noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard.

*The Intersessional Task Group Leader to submit an updated draft Guideline on the intersessional work on task 2.1.1 to the IALA Secretariat by **11 July 2022** as an input to VTS53.*

The Secretariat is requested to make editorial checks (formatting and application of the IALA Style Guide) on the draft Guideline on the portrayal of VTS information and data and to publish a final version on the IALA web one month in advance of the VTS53 opening plenary.

*That Committee participants provide any comment on the final draft Guideline on the portrayal of VTS information and data by **6 September 2022** in order for the document to be approved at VTS53.*

10.2 Task 2.1.2 Develop a Recommendation and Guideline on Cyber-Security in AtoN operations (lead by ARM, all Committees via Workshop)

The Working Group noted the input paper from ARM and carried out an initial high-level review of the liaison note from ARM (VTS52.10.4.1) on Cyber Security which included a draft embedded Recommendation and Guideline. More detailed work will be conducted at VTS53.

Action item:

That the Secretariat forward the WP liaison note from ARM on Cyber Security (VTS52-13.2.2.3) to VTS53 for further consideration and response to ARM.

10.3 TASK 2.2.0 Consider relevant VTS documents to be revised/updated next WP

The Working Group carried out a discussion on documents to be updated during the next Work Period and concluded that the following were worth further consideration:

- IVEF Recommendation (present Task 2.3.2) – carry over from 2018-2023 WP
- Add specific Management Information System to sub-guideline in G-1111

10.4 Task 2.2.1 Review and update Recommendation V-128 on Operational and Technical Performance of VTS Systems

Task has not yet commenced but will start intersessionally and follow the deadlines of Task 2.2.2.

The intention is to finalize the revision at VTS53.

Action item(s):

That Committee participants are invited to join the intersessional task group working on Task 2.2.1 Review and update Recommendation V-128 on Operational and Technical Performance of VTS Systems and to express their interest to task group leader Richard Aase (richard.aase@kystverket.no), noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard.

*The Intersessional Task Group Leader to submit an updated draft Document on task 2.2.1 to the IALA Secretariat by **11 July 2022** as an input to VTS53.*

The Secretariat is requested to make editorial checks (formatting and application of the IALA Style Guide) on the draft Recommendation R0128 and to publish a final version on the IALA web one month in advance of the VTS53 opening plenary.

*That Committee participants provide any comment on the final draft of R0128 by **6 September 2022** in order for the document to be approved at VTS53.*

10.5 Task 2.2.2 Review and update Guideline 1111 on Preparation of Operational and Technical Performance Requirements for VTS Systems

Task 2.2.2 is a complex task because it comprises of the main Guideline and nine sub-Guidelines, all of which must be complete before submitting to IALA Council for approval. Significant efforts have been made to complete this, both during formal sessions and intersessionally.

During VTS52 the main Guideline (VTS52-13.2.2.6) was completed and approved by the Committee provisionally, however, it will be forwarded to VTS53 as a working paper. Once all the sub-Guidelines have been completed and approved, the complete package of G1111 documents will be sent to Council for approval.

All nine sub-Guidelines will be further developed and completed intersessionally and will be submitted to the Secretariat by 11 July 2022 for formatting and application of the IALA Style Guide for VTS53.

The intersessional groups will continue to be chaired by:

G1111-1 Dmitry Rostopshin, (dmitry.rostopshin@wartsila.com)

G1111-2 Hans Verra, (h.verra@portofrotterdam.com)

G1111-3 Jens Christian Pedersen, (jcp@terma.com)

G1111-4 Richard Aase, (Richard.aase@kystverket.no)

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Action Item(s):

The Secretariat is requested to forward all working papers on G1111 to VTS53.

The Committee participants are invited to join the intersessional task groups working on task 2.2.2 and to express their interest to Intersessional Task Group Leaders as listed in section 10.5 of the VTS52 report noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard.

*The Intersessional Task Group Leaders to submit an updated draft sub-guideline on task 2.2.2 to the IALA Secretariat by **11th July 2022** as an input to VTS53.*

The Secretariat is requested to make editorial checks (formatting and application of the IALA Style Guide) on the draft sub-guidelines on task 2.2.2 and to publish final versions on the IALA web one month in advance of the VTS53 opening plenary.

*That Committee participants provide any comment on the final draft of the sub-guidelines on task 2.2.2 by **6 September 2022** in order for the documents to be approved at VTS53.*

10.6 Task 2.3.1 Develop a Product Specification under the S-100 framework for VTS

An input paper from the China MSA providing several proposals was reviewed which resulted in an updated version (0.65) of the Digital Information Service product specification. Additional work was carried out to ensure the draft aligns with the new IMO Resolution A.1158(32) Guidelines for Vessel Traffic Services. Work will progress during VTS53 immediately after the IALA workshop on Developing S-100/S-200 Product Specifications.

Action item(s):

That the Secretariat forward the WP develop a Product Specification under the S-100 framework for VTS (VTS52-13.2.2.4) to VTS53 for further consideration.

10.7 Task 2.3.2 Review and update Recommendation R0145 (V-145) on the Inter-VTS Exchange Format (IVEF) Service

This task has not progressed due to ongoing participation on Task 2.2.2 and will be forwarded to the next WP.

Action item(s):

That the Secretariat forward (VTS52-13.2.2.5) WP on review and update Recommendation R0145 (V-145) on the Inter-VTS Exchange Format (IVEF) Service to VTS53.

10.8 TASK 2.7.1 Update G1130 (Technical aspects of information exchange between VTS and allied or other services) to include cyber-security considerations

Due to ongoing participation on Task 2.2.2 this task was not started. Work is planned to begin at VTS53.

11. WORKING GROUP 3 – VTS PERSONNEL AND TRAINING (WG3)

The Chair of the Working Group thanked all participants for their hard work during the working period.

A number of Working Group sessions were held over the course of the VTS52 online meeting. The Working Group focused on the following tasks:

- 3.1.1 - Develop Guideline on human factors and ergonomics in VTS
- 3.3.1 - Review and update Recommendation V-103 on the Standards for Training and Certification of VTS Personnel and its associated Model Courses.
- Review of proposed tasks for 2023-2027
- Additional Papers identified for review

All input papers identified for WG3 were addressed.

11.1 Develop Guidance on Human Factors in VTS (Task 3.1.1)

Leader: A. Ovcharenko / J. Carson-Jackson

The Working Group reviewed VTS52-11.1.1, and VTS52-11.1.1.1, the draft guideline on Human Factors and Ergonomics in VTS. The work carried out intersessionally between VTS51 and VTS52 was noted. The document was reviewed in detail. Changes to grammar and formatting were finalised, a new image to highlight ergonomic positioning developed.

The document was completed and approved at VTS52 (VTS52-13.1.3.1) for forwarding to IALA Council.

Action item:

The IALA Secretariat forward the draft Guideline on Human Factors and Ergonomics in VTS (VTS52-13.1.3.1) to IALA Council for approval.

11.2 Review and update Recommendation R0103 on the Standards for Training and Certification of VTS Personnel and associated Model Courses (Task 3.3.1)

Overall Task Leader: J Carson-Jackson

As previously agreed, noting the scope of the work, the task was broken into sub-tasks:

3.3.1a – Review and deprecate R0103 to a recommendation and guideline (completed)

3.3.1b – Review/update model course V-103/1

3.3.1c – Review / update model course V-103/2

3.3.1d – Review / updated model course V-103/3 (Task Leader S. Priem)

3.3.1e – Review / update model course V-103/4

3.3.1f – Review / update model course V-103/5

The work at VTS52 focused on 3.3.1b – review of V-103/1 (VTSO) with Task Leader J Carson-Jackson and commenced the review of 3.3.1d – review of V-103/3 (VTS OJT) with Task Leader S Priem.

Input paper VTS50-11.3.1 ‘Proposal for adding “typical Accident Case Study” subject to Model Courses V-103/3 was noted, including the agreement at VTS51 that the use of case studies provides value for all IALA VTS Model Courses.

11.2.1 Task 3.3.1b – Review and update model course V-103/1

The Working Group reviewed the input papers VTS52-11.3.1, 11.3.1.1, 11.3.1.2, and 11.3.1.3

The work carried out during the intersessional working group was noted and used as the basis for the work at VTS52.

VTS52 focused on completing the detailed review of the seven modules in the model course, based on the revised competence table format agreed at VTS51. Noting the provision of additional input during VTS52, it was agreed to continue the final review of the remaining modules (modules 3 and 7) and then carry out an overall review of the model course through intersessional work between VTS52 and VTS53. Proposed dates and times for the online intersessional work are provided below:

- Thursday, 28 April 2022 – 0900-1030 UTC
- Thursday, 19 May 2022 – 0900-1030 UTC
- Thursday, 26 May 2022 – 0900-1030 UTC (if required)

Once the review is complete there will be opportunity for final input and consultation prior to VTS53.

Action item(s):

The Committee Participants are asked to review the latest version of the model course located on the fileshare and provide comments to J Carson-Jackson (jillian@jcjconsulting.net) by 21 April 2022.

The Committee participants are invited to join the intersessional task group working on review and update model course V-103/1 and to express their interest to Jillian Carson-Jackson (jillian@jcjconsulting.net) by 21 April 2022, noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard.

*The Intersessional Task Group Leader to submit an updated draft model course V-103/1 to the IALA Secretariat by **11th July 2022** as an input to VTS53.*

The Secretariat is requested to make editorial checks (formatting and application of the IALA Style Guide) on the draft model course V-103/1 and to publish a final version on the IALA web one month in advance of the VTS53 opening plenary.

*That Committee participants provide any comment on the final draft of the updated model course V-103/1 by **6 September 2022** in order for the model course to be approved at VTS53.*

11.2.2 Task 3.3.1d – Review and update model course V-103/3

The Working Group commenced the review of Model Course V-103/3 (VTS On-The-Job Training). There will be 3 intersessional meeting to progress the review:

- Thursday, 14 April 2022 – 0900-1030 UTC
- Tuesday, 26 April 2022 – 0900-1030 UTC
- Thursday, 12 May 2022 – 0900-1030 UTC

Action item:

The Committee participants are invited to join the intersessional task group working on review and update model course V-103/3 and to express their interest to Stefaan Priem (stefaan.priem@mow.vlaanderen.be) by 13 April 2022, noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard.

*The Intersessional Task Group Leader to submit an updated draft model course V-103/3 to the IALA Secretariat by **11th July 2022** as an input to VTS53.*

The Secretariat is requested to make editorial checks (formatting and application of the IALA Style Guide) on the draft model course V-103/3 and to publish a final version on the IALA web one month in advance of the VTS53 opening plenary.

*That Committee participants provide any comment on the final draft of the updated model course V-103/3 by **6 September 2022** in order for the model course to be approved at VTS53.*

11.3 Proposed work items for IALA Work Term 2023-2027

Building on the work commenced at VTS50 and VTS51, the Working Group considered the proposed new task plan (VTS52-7.3.5) and the draft Task Register, as provided by the Vice-Chair of the VTS Committee.

Amendments were provided to the Vice-Chair in track changes format, for consideration in the overall review of the task plan and task register for 2023-2027 and were also uploaded in the IALA File Share under VTS / Work Programme 2023-2027.

11.4 Additional Document Review

During the meeting the Working Group reviewed additional documents as identified by the Chair and Vice-Chair of the Committee for review by all working groups.

Input papers VTS52-3.2.7 and 3.2.7.1 – NI Seaways Article on VTS – were noted with thanks to the authors B Goldman and N Trainor.

Input paper VTS52-6.2.1 on the IALA Dictionary Management and update procedures was noted with thanks to the IALA Secretariat for the clarification of procedures.

12. ANY OTHER BUSINESS

Under AOB there was a discussion on the use of liaison notes, particular between the IALA technical committees. Concerns were reiterated that the process was not conducive to communicating developments between the committees and coordinating their input in a timely manner. It was noted that depending on the schedule of meetings it can take 6-12 months for a committee forwarding a liaison note to receive comment/input from the other committees.

The Chair and Secretariat advised that this had been considered by the PAP and that where necessary chairs are encouraged to communicate directly with each other but means to communicate between committees that were swift but still retained the consensus of a committee would always be considered.

13. SUMMARY OF OUTPUT AND WORKING PAPERS

The Working Group Chairs reported on the work carried out by their Working Groups.

Outputs from VTS52 were approved by the Committee using the silent approval procedure. The output documents and working papers are listed in Annex D.

The Chair mentioned that separating the working documents in the input paper list in the same manner that is made in the output list had been very successful as it was very easy to see which of the documents that were new inputs and which that had been forwarded from the last session. The Chair suggested to continue with that procedure.

As VTS53 will be the last session of this working period and there are still some tasks that have not been finalized and that should not be forwarded to the next working period, the Chair informed the participants that a temporary procedure will apply for some tasks in order to ensure that those documents are ready for approval at VTS53. Therefore intersessional work should be made and final documents should be submitted to IALA Secretariat before 11 July 2022 so that the editorial checks can be done in advance and the final versions be published one month before the opening plenary of VTS53. By this action the Chair believes that enough time is given for the participants to read the new documents and to approve them at the beginning of VTS53 or to submit comments before 6 September 2022.

The Committee Chair then thanked the Working Group Chairs, Vice-Chairs, Task Group Leaders and participants of the working groups for all their efforts during the session.

14. REVIEW OF SESSION REPORT

The draft report of the meeting (VTS52-14.1) was reviewed by the Committee at the Closing Plenary. Any comment or corrections should be sent to the Secretariat before 20 April 2022.

The Chair thanked especially the Committee Secretary, Tom Southall, for all the assistance during the session and especially with the report and the web updates.

15. DATE AND VENUE OF NEXT MEETINGS

VTS53 is planned to be held between 19 - 23 September 2022 at IALA Headquarters, Saint Germain-en-Laye, France. The Secretariat will continue to monitor global events of the COVID-19 pandemic and advise its Members of any changes that may be instigated.

The Chair informed about a workshop of interest to the work of the VTS Committee, which is the IALA-IHO workshop on S-100 / S-200 Product Specification development and portrayal, led by ARM, and which will be held in Aalesund, Norway on 5-9 September 2022.

The Chair also reminded the participants to plan for the upcoming IALA Conference that will take place between 27 May – 3 June 2023 in Rio de Janeiro, Brazil!

Other IALA events will be publicised on the IALA website.

16. CLOSING OF THE MEETING

The Chair thanked all Committee participants again for all the hard work and progress as well as all the valuable outputs that had been made during the meeting and that every participant should be satisfied for what had been accomplished.

She also hoped that everyone could take the IALA survey that is sent out after every Committee meeting in order to receive feedback for continuous improvements.

Deputy Secretary-General Omar Frits Eriksson also thanked all participants for their work at IALA during VTS52 and looks forward to seeing the Committee in person at the next session.

Finally, the Chair asked if there were any final comments that participants wished to make; there were none, at which she hoped to meet all once again, hopefully face-to-face, during VTS53.

17. LIST OF ANNEXES

A. Agenda

A copy of the agenda is at Annex A.

B. Participants list

A list of participants is at Annex B.

C. Input Papers

A list of input papers is at Annex C.

D. Output and Working papers

A list of output and working papers is at Annex D.

E. Action Items

A list of action items is at Annex E.



52nd Meeting of the Vessel Traffic Services Committee (VTS52)

The 52nd session of the **VTS Committee** will be held between 30 March – 13 April 2022 virtually.

The opening plenary will be held between 10:00 – 12:00 UTC on Wednesday 30 March 2022 and the closing plenary will be held between 10:00 – 12:00 UTC on Wednesday 13 April 2022.

Agenda

1. Introduction
 - 1.1. Welcome from the Secretary-General
 - 1.2. Approval of agenda
 - 1.3. Apologies
 - 1.4. Working arrangements
2. Review of action items from last meeting
 - 2.1. Review of action items from VTS51
3. Review of input papers
 - 3.1. Input papers to VTS52
 - 3.2. Input papers not related to an existing task
4. Reports from other bodies Minsu Jeon
 - 4.1. IALA
 - 4.1.1. IALA Council
 - 4.1.2. IALA Policy Advisory Panel (PAP)
 - 4.2. IMO
 - 4.3. IHO
 - 4.4. ITU
5. Reports from rapporteurs
Neil Trainor
Neil Trainor
Fredrik Karlsson
Jillian Carson-Jackson
 - 5.1. MASS related to VTS
 - 5.2. VTS questionnaire coordination group
 - 5.3. e-Nav operational service description
 - 5.4. IALA NAVGUIDE
6. Online presentations (via webinars on specific dates and times to be announced)
Kevin Gregory
Minsu Jeon
Anders Johannesson, SMA
 - 6.1. IALA World Wide Academy Update
 - 6.2. IALA Dictionary Procedures
 - 6.3. Implementing STM Tools into VTS Operations and Standard Operational Procedures

- 6.4. VTS in China's Inland Waterways Feng Xue, China MSA
- 6.5. IVEF Update KRISO, Republic of Korea
- 7. Work programme
 - 7.1. Work Programme (2018 – 2023), VTS Task Plan, Task Register
 - 7.2. Action plan for VTS52
 - 7.3. VTS tasks for work programme 2023 – 2027
- 8. Establish working groups (WG)
- 9. WG1 - Operations
 - 9.1. VTS implementation
 - 9.2. VTS operations
 - 9.3. VTS communications
 - 9.4. VTS Manual updates
 - 9.5. VTS Questionnaire
 - 9.6. Additional tasks/work during VTS52
- 10. WG2 - Technology
 - 10.1. VTS data and information management
 - 10.2. VTS technology
 - 10.3. Data models and data encoding
 - 10.4. Additional tasks/work during VTS52
- 11. WG3 - VTS training
 - 11.1. VTS implementation
 - 11.2. VTS operations
 - 11.3. Training and assessment
 - 11.4. Competency, certification and revalidation
 - 11.5. Additional tasks/work during VTS52
- 12. Any other business
- 13. Summary of output and working papers
 - 13.1. Output papers
 - 13.2. Working papers
- 14. Review of session report
- 15. Date and venue of next meeting
- 16. Close of the meeting

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ANNEX C

LIST OF INPUT PAPERS

All papers are posted on the Committee section of the IALA website. Items in blue = late or updated paper.

Meeting	Paper Number	Input Paper Title	Source	Presented by / WG
VT552-	1.2.1	Provisional Agenda	IALA Secretariat	All
VT552-	2.1.1	VT551 Action Items	IALA Secretariat	All
VT552-	3.0	Input paper committee meeting template	IALA Secretariat	All
VT552-	3.1.1	Input Paper List	IALA Secretariat	All
VT552-	3.1.2	Working paper list	IALA Secretariat	All
VT552-	3.2.1	ENG Liaison note to PAP Sustainability	PAP & ENG	All
VT552-	3.2.2	Presentation on STM VTS SOP V1.0	Swedish Maritime Administration	All
VT552-	3.2.3	ARM Liaison note to all committees on Guideline 1052 Quality Management Systems for AtoN Service Delivery	ARM14	1
VT552-	3.2.4	ARM Liaison Note to ENAV and VTS - Technologies to Support Maritime Single Window	ARM14	CMT
VT552-	3.2.5	Liaison note to all committees on Recommendation R1001 The IALA Maritime Buoyage System (MBS) Edition 2 (ARM14-11.2.1.1)	PAP & ARM	All / CMT
VT552-	3.2.6	Liaison note to all committees on sustainability workshop (ENG15-12.0.1)	ENG15	All / CMT
VT552-	3.2.7	Cover note - NI Seaways Magazine Article Apr 2022 - VTS Extract	Barry Goldman & Neil Trainor	All
VT552-	3.2.7.1	NI Seaways Magazine Article Apr 2022 - VTS Extract	Barry Goldman & Neil Trainor	All
VT552-	4.3.1	Report IHO IALA Technical 6th Coordination Meeting v3	IALA Secretariat	All
VT552-	4.4.1	IALA Report on ITU-R WP5B meeting 29 Nov to 12 Dec 2021 fin	S Bober	All
VT552-	6.2.1	Dictionary management	IALA Secretariat	All
VT552-	7.1.1	Revised Committee work programme 2018-2023 (C74-10.2.2)	C74	All

Meeting	Paper Number	Input Paper Title	Source	Presented by / WG
VT52-	7.1.2	Task Plan 2018-2023 (2022-03-14) revised by CMT	VT5 CMT	All
VT52-	7.3.1	Proposal for developing a Guideline on Quality Management System for Vessel Traffic Service	China MSA	1 (to be forwarded to the next work period)
VT52-	7.3.1.1	Enclosure 1 - Draft of Guideline on Quality Management System for Vessel Traffic Service	China MSA	1 (to be forwarded to the next work period)
VT52-	7.3.1.2	Enclosure 2 - Questionnaire for VTS QMS	China MSA	1 (to be forwarded to the next work period)
VT52-	7.3.2	Input Paper(Development of the Guidelines on the VTS English Competency Test)_Korea Coast Guard	Korea Coast Guard	3 (to be forwarded to the next work period)
VT52-	7.3.3	Input Paper(Proposal of update on the IVEF Service for external access control in case of emergency)_Korea Coast Guard	Korea Coast Guard	2
VT52-	7.3.4	Proposal for Producing Functional and Performance Requirements for Management Information System	China MSA	2
VT52-	7.3.5	New Task Plan 2023-2027(2022-03-14)Rev3_clean	VT5 CMT	All
VT52-	9.1.1	Cover note on updating R0119 and G1150 (WWA)	WWA	1
VT52-	9.1.1.1	Updating R0119 Ed4.1 Establishment of a VTS (WWA)	WWA	1
VT52-	9.1.1.2	Updating G1150 Ed2.1 Establishing Planning and Implementing a VTS (WWA)	WWA	1
VT52-	9.2.1	Input Paper - Output from TG-1.2.5 - Implications of MASS from a VTS Perspective	IG1.2.5	1
VT52-	9.2.1.1	IG.1.2.5 Discussion paper - Implications of MASS from a VTS Perspective	IG1.2.5	1
VT52-	9.2.2	Draft Guideline on how to develop a safety culture in VTS	China MSA	1 and 3 Withdrawn
VT52-	9.2.2	Liaison note to VTS - G1105 (ARM15-11.3.1.3)	ARM15	1

Meeting	Paper Number	Input Paper Title	Source	Presented by / WG
VT552-	9.6.1	Input Paper - Output from IG-1.4.3 - Future VTS	IG1.4.3	1
VT552-	9.6.1.1	IG 1.4.3 Future VTS Discussion Paper (Input to VT552)	IG1.4.3	1
VT552-	9.6.2	Proposal for an Abnormal Situation Detection System using Big Data	Korea Coast Guard	1
VT552-	10.2.1	Proposal on the revised Guideline 《G1111-3》	China MSA	2-Withdrawn
VT552-	10.2.1	WG2 Intersessional Group Work on Sub-Guidelines From Guideline G1111	WG2 Chair	2
VT552-	10.2.1.1	Intersessional Group - G 1111 Establishing Functional Performance Requirements for VTS systems	IG	2
VT552-	10.2.1.2	Intersessional Group - G.1111-2 VHF Voice Communications for VT552	IG	2
VT552-	10.2.1.3	Intersessional Group - G.1111-3 Producing Requirements for RADAR systems	IG	2
VT552-	10.2.1.4	Intersessional Group - G.1111-9 Framework for Acceptance of VTS Systems	IG	2
VT552-	10.2.1.5	Intersessional Group - G1111-6 Electro Optic Sensors	IG	2
VT552-	10.2.1.6	Intersessional Group - G1111-7 RDF	IG	2
VT552-	10.2.1.7	Input on G1111-5 Environment	Peter Eade	2
VT552-	10.2.1.8	Input on G1111-8 Long range	Peter Eade	2
VT552-	10.3.1	Proposal on Draft of VTS Digital Information Service	China MSA	2
VT552-	10.4.1	Liaison note from ARM to all committees on cyber security (ARM15-11.3.1.1)	ARM15	2
VT552-	11.1.1	Cover note on draft Guideline - HF_Ergonomics in VTS	IG3.1.1	3
VT552-	11.1.1.1	Draft Guideline HF_Ergonomics-VTS-WG3 ICG-03	IG3.1.1	3
VT552-	11.3.1	Cover note on Task 3.3.1b-Revise V-103_1-VTSO	IG3.3.1	3
VT552-	11.3.1.1	V-103_1-Revised-input to VT552 (no Module 3 or 7)	IG3.3.1	3
VT552-	11.3.1.2	V-103_1-draft revised module 3	IG3.3.1	3
VT552-	11.3.1.3	V-103_1-draft revised module 7	IG3.3.1	3

Working papers from VTS51

Paper Number	Working Paper Title	Action
13.3.0.1	WP updated Task Plan post VTS51	To VTS52
13.3.0.2	WP Provisional 2023 – 2027 Task Plan	To VTS52
13.3.1.1	WP draft description of Maritime Service 1- VTS	To VTS52
13.3.1.2	WP Draft Guideline on Maritime Services	To VTS52
13.3.1.3	WP Appendix 1 MS1-3	To VTS52
13.3.1.4	WP TG1.2.5 Possible case studies - Operations and Trials of Autonomous Ships (as at VTS51)	To VTS52
13.3.1.5	WP TG.1.2.5 Draft Discussion paper - Implications of MASS from a VTS perspective	To VTS52
13.3.1.6	WP TG-1.2.5 Guiding Principles	To VTS52
13.3.1.7	WP draft guideline on Safety Culture	To VTS52
13.3.1.8	WP Task 1.4.3 - Future VTS	To VTS52
13.3.1.9	WP Guiding Principles - Future VTS (1.0)	To VTS52
13.3.2.1	WP draft Guideline on the portrayal of VTS information and data	To VTS52
13.3.2.2	WP on develop a Product Specification under the S-100 framework for VTS	To VTS52
13.3.2.3	WP on review and update Recommendation R0145 (V-145) on the Inter-VTS Exchange Format (IVEF) Service	To VTS52
13.3.2.4	WP Draft G 1111 Establishing Functional & Performance Requirements for VTS systems	To VTS52
13.3.2.5	WP Draft G.1111-1	To VTS52
13.3.2.6	WP G1111-2 Producing Functional and Performance Requirements for Voice Communications	To VTS52
13.3.2.7	WP G1111-3 Producing Requirements for RADAR systems	To VTS52
13.3.2.8	WP G 1111-4 Producing Functional and Performance Requirements for AIS and VDES systems	To VTS52
13.3.2.9	WP G 1111-5 Producing Functional and Performance Requirements for Environment Monitoring systems	To VTS52
13.3.2.10	WP G 1111-6 Producing Functional and Performance Requirements for Electro Optical systems	To VTS52

Paper Number	Working Paper Title	Action
13.3.2.11	WP G 1111-7 Producing Functional and Performance Requirements for Radio Direction Finder systems	To VTS52
13.3.2.12	WP G 1111-8 Producing Functional and Performance Requirements for Long Range Sensor system	To VTS52
13.3.2.13	WP Task 2.2.2j G.1111-9 Framework for Acceptance of VTS Systems	To VTS52
13.3.3.1	WP IALA Guideline on Human Factors and Ergonomics in VTS	To VTS52
13.3.3.2	WP IALA Model Course V103/ 1	To VTS52

Output documents are submitted to a body other than the Committee initiating the document for further review/action or as information.

Meeting	Paper No.	Output Paper Title	Action
VTS52-	13.1.1.1	Liaison Note to ARM on the revised Guideline <i>G1052 Quality Management Systems for AtoN Services Delivery</i>	ARM16
VTS52-	13.1.1.2	Recommendation R0119 Establishment of a VTS	Council
VTS52-	13.1.1.3	Guideline G1150 Establishing Planning and implementing a VTS	Council
VTS52-	13.1.1.4	Draft description of Maritime Service 1- Vessel Traffic Service	PAP
VTS52-	13.1.1.5	Liaison note re TG1.2.5 MASS	All committees and MTF
VTS52-	13.1.1.5.1	WP TG.1.2.5 Discussion paper - Implications of MASS from a VTS perspective (as at VTS52)	All committees and MTF
VTS52-	13.1.1.5.2	WG1 - Report from TG1.2.5 and TG1.4.3 Joint Session	All committees and MTF
VTS52-	13.1.1.6	Liaison note re TG1.4.3	All committees
VTS52-	13.1.1.6.1	WP Task 1.4.3 Future VTS Discussion Paper (as at VTS52)	All committees
VTS52-	13.1.1.6.2	WP WG1 - Report from TG1.2.5 and TG1.4.3 Joint Session	All committees
VTS52-	13.1.3.1	draft Guideline on Human Factors and Ergonomics in VTS	Council

Working papers will remain within the Committee for further review during VTS52.

Meeting	Paper No.	Output Paper Title	Action
VTS52-	13.2.0.1	WP Task plan post VTS52	VTS53
VTS52-	13.2.0.2	WP Task register post VTS52	VTS53
VTS52-	13.2.0.3	WP Provisional 2023 – 2027 Task Plan	
VTS52-	13.2.1.1	WP Draft Guideline on Maritime Services	VTS53

VT552-	13.2.1.2	WP Appendix 1 MS1-3	VT553
VT552-	13.2.1.3	WP TG-1.2.5 Guiding Principles	VT553
VT552-	13.2.1.4	WP TG.1.2.5 Discussion Paper - Implications of MASS from a VTS perspective (as at VT552)	VT553
VT552-	13.2.1.5	WP WG1 Report from TG1.2.5 and TG1.4.3 Joint Session	VT553
VT552-	13.2.1.6	WP draft guideline on Safety Culture	VT553
VT552-	13.2.1.7	WP draft Guideline on VTS Digital Communications	VT553
VT552-	13.2.1.8	WP Task 1.4.3 Future VTS Discussion Paper (as at VT552)	VT553
VT552-	13.2.1.9	WP Task 1.4.3 Future VTS Discussion Paper (as at VT552)	VT553
VT552-	13.2.1.10	WP TG-1.2.5 Guiding Principles	VT553
VT552-	13.2.2.1	WP draft Guideline on the portrayal of VTS information and data	VT553
VT552-	13.2.2.2	WP liaison note from ARM on Guideline G1105	VT553
VT552-	13.2.2.3	WP liaison note from ARM on Cyber Security	VT553
VT552-	13.2.2.4	WP develop a Product Specification under the S-100 framework for VTS	VT553
VT552-	13.2.2.5	WP on review and update Recommendation R0145 (V-145) on the Inter-VTS Exchange Format (IVEF) Service	VT553
VT552-	13.2.2.6	WP Guideline G1111 Establishing Functional Performance Requirements for VTS systems	VT553

Action Items for the IALA Secretariat

1. The Secretariat is requested to forward the updated Task Plan (VTS52-13.2.0.1) and Task Register (VTS52-13.2.0.2) to VTS53. 18
2. That the Secretariat forward the WP Provisional 2023 – 2027 Task Plan (VTS52-13.2.0.3) to VTS52 as a working paper. 18
3. The Secretariat is requested to forward the Liaison Note to ARM on the revised Guideline G1052 Quality Management Systems for AtoN Services Delivery (VTS52-13.1.1.1) for their consideration. 19
4. The Secretariat is requested to forward the updated Recommendation R0119 Establishment of a VTS (VTS52-13.1.1.2) and the updated Guideline G1150 Establishing Planning and implementing a VTS (VTS52-13.1.1.3) to Council for approval. 19
5. The Secretariat is requested to forward the draft description of Maritime Service 1- Vessel Traffic Service (VTS52-13.1.1.4) to PAP for inclusion in the IALA's submission for the update of MSC.1/Circ.1610. 19
6. The Secretariat is requested to forward the WP Draft Guideline on Maritime Services (VTS52-13.2.1.1) and WP Appendix 1 MS1-3 (VTS52-13.2.1.2) as working papers to VTS53 for further development. 19
7. The Secretariat is requested to forward the following documents to the other committees and the MASS Task Force for their information and comment: VTS52-13.1.1.5.1 WP TG.1.2.5 Discussion paper - Implications of MASS from a VTS perspective (as at VTS52; VTS52-13.1.1.5.2 WG1 - Report from TG1.2.5 and TG1.4.3 Joint Session; and a draft liaison note to accompany the documents (VTS52-13.1.1.5 Liaison note re TG1.2.5). 21
8. The Secretariat is requested to forward VTS52-13.2.1.3 WP TG-1.2.5 Guiding Principles, VTS52-13.2.1.4 WP TG.1.2.5 Discussion Paper - Implications of MASS from a VTS perspective (as at VTS52) and VTS52-13.2.1.5 WP WG1 - Report from TG1.2.5 and TG1.4.3 Joint Session as working papers to VTS53. 22
9. The Secretariat is requested to forward the WP draft guideline on Safety Culture (VTS52-13.2.1.6) as a working paper to VTS53 for further development. 22
10. The Secretariat is requested to forward the WP draft Guideline on VTS Digital Communications (VTS52-13.2.1.7) as a working paper to VTS53 for further development. 23
11. The Secretariat is requested to forward VTS52-13.1.1.6.1 WP Task 1.4.3 Future VTS Discussion Paper (as at VTS52), and a draft liaison note to accompany the documents is at (VTS52-13.1.1.6 Liaison note re TG1.4.3) to the other committees for their information and comment. 24
12. The Secretariat is requested to forward VTS52-13.2.1.9 WP Task 1.4.3 Future VTS Discussion Paper (as at VTS52) and VTS52-13.2.1.10 WP TG-1.2.5 Guiding Principles as working papers to VTS53. 24
13. The Secretariat is requested to suggest amendments in accordance with PAP44 to the VTS Chair and TGL of the VTS Manual to reflect that only recommendations are normative or informative (see also agenda item 4.1.2). 24
14. That the Secretariat forward the working paper on draft Guideline on the portrayal of VTS information and data (VTS52-13.2.2.1) to VTS53 for further consideration. 25

15. That the Secretariat forward the WP liaison note from ARM on Guideline G1105 (VTS52- 13.2.2.2) to VTS53 for further consideration and response to ARM. 25
16. The Secretariat is requested to make editorial checks (formatting and application of the IALA Style Guide) on the draft Guideline on the portrayal of VTS information and data and to publish a final version on the IALA web one month in advance of the VTS53 opening plenary. 25
17. That the Secretariat forward the WP liaison note from ARM on Cyber Security (VTS52-13.2.2.3) to VTS53 for further consideration and response to ARM. 25
18. The Secretariat is requested to make editorial checks (formatting and application of the IALA Style Guide) on the draft Recommendation R0128 and to publish a final version on the IALA web one month in advance of the VTS53 opening plenary. 26
19. The Secretariat is requested to forward all working papers on G1111 to VTS53. 26
20. The Secretariat is requested to make editorial checks (formatting and application of the IALA Style Guide) on the draft sub-guidelines on task 2.2.2 and to publish final versions on the IALA web one month in advance of the VTS53 opening plenary. 27
21. That the Secretariat forward the WP develop a Product Specification under the S-100 framework for VTS (VTS52-13.2.2.4) to VTS53 for further consideration. 27
22. That the Secretariat forward (VTS52-13.2.2.5) WP on review and update Recommendation R0145 (V-145) on the Inter-VTS Exchange Format (IVEF) Service to VTS53. 27
23. The IALA Secretariat forward the draft Guideline on Human Factors and Ergonomics in VTS (VTS52-13.1.3.1) to IALA Council for approval. 28
24. The Secretariat is requested to make editorial checks (formatting and application of the IALA Style Guide) on the draft model course V-103/1 and to publish a final version on the IALA web one month in advance of the VTS53 opening plenary. 29
25. The Secretariat is requested to make editorial checks (formatting and application of the IALA Style Guide) on the draft model course V-103/3 and to publish a final version on the IALA web one month in advance of the VTS53 opening plenary. 29

Action Items for Participants

26. The Vice-Chair is requested to process the new tasks and provide an updated VTS Task Plan for 2023-2027 to VTS52. 18
27. The Committee participants are invited to join the intersessional task group working on the development of guidance on the implications of MASS from a VTS perspective and to express their interest to Neil Trainor (neil.trainor@amsa.gov.au) by 30 April 2022, noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard. 22
28. The Intersessional Task Group Leader to provide input on the intersessional work on task 1.2.5 to VTS53. 22
29. The Committee participants are invited to submit comments and remarks on the WP draft guideline on Safety Culture (VTS52-13.2.1.6) and to express their interest to join an intersessional correspondence group to Trond Ski (trond.ski@kystverket.no) by 30 April 2022. Input to the draft guideline may be provided using a questionnaire found at the IALA file-share under the VTS52/WG1/TG 1.2.6 folder. 22

30. The Intersessional Task Group Leader to provide input on the intersessional work on task 1.2.6 to VTS53. 22
31. Tet Committee participants are invited to join the intersessional task group working on the development of guidance on VTS Digital Communications and to express their interest to Tuomas Martikainen (tuomas.martikainen@vayla.fi) by 30 April 2022, noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard. 23
32. The Intersessional Task Group Leader to provide input on the intersessional work on task 1.3.2 to VTS53. 23
33. The Committee participants are invited to join the intersessional task group working on 'Future VTS' and to express their interest to Neil Trainor (neil.trainor@amsa.gov.au) by 30 April 2022, noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard. 24
34. The Intersessional Task Group Leader to provide input on the intersessional work on task 1.4.3 to VTS53. 24
35. The Committee participants are invited to join the intersessional task group working on the draft Guideline on the portrayal of VTS information and data and to express their interest to Peter Kito (peterkito@jrcamerica.com) by 30 April 2022, noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard. 25
36. The Intersessional Task Group Leader to submit an updated draft Guideline on the intersessional work on task 2.1.1 to the IALA Secretariat by **11 July 2022** as an input to VTS53. 25
37. That Committee participants provide any comment on the final draft Guideline on the portrayal of VTS information and data by **6 September 2022** in order for the document to be approved at VTS53. 25
38. That Committee participants are invited to join the intersessional task group working on Task 2.2.1 Review and update Recommendation V-128 on Operational and Technical Performance of VTS Systems and to express their interest to task group leader Richard Aase (richard.aase@kystverket.no), noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard. 26
39. That Committee participants provide any comment on the final draft of R0128 by **6 September 2022** in order for the document to be approved at VTS53. 26
40. The Committee participants are invited to join the intersessional task groups working on task 2.2.2 and to express their interest to Intersessional Task Group Leaders as listed in section 10.5 of the VTS52 report noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard. 26
41. The Intersessional Task Group Leaders to submit an updated draft sub-guideline on task 2.2.2 to the IALA Secretariat by **11th July 2022** as an input to VTS53. 27
42. That Committee participants provide any comment on the final draft of the sub-guidelines on task 2.2.2 by **6 September 2022** in order for the documents to be approved at VTS53. 27
43. The Committee Participants are asked to review the latest version of the model course located on the fileshare and provide comments to J Carson-Jackson (jillian@jcjconsulting.net) by 21 April 2022. 28
44. The Committee participants are invited to join the intersessional task group working on review and update model course V-103/1 and to express their interest to Jillian Carson-Jackson

- (jillian@jcjconsulting.net) by 21 April 2022, noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard. 29
45. The Intersessional Task Group Leader to submit an updated draft model course V-103/1 to the IALA Secretariat by **11th July 2022** as an input to VTS53. 29
46. That Committee participants provide any comment on the final draft of the updated model course V-103/1 by **6 September 2022** in order for the model course to be approved at VTS53. 29
47. The Committee participants are invited to join the intersessional task group working on review and update model course V-103/3 and to express their interest to Stefaan Priem (stefaan.priem@mow.vlaanderen.be) by 13 April 2022, noting the dates and times of the intersessional meetings will be published on the IALA VTS Committee Dashboard. 29
48. The Intersessional Task Group Leader to submit an updated draft model course V-103/3 to the IALA Secretariat by **11th July 2022** as an input to VTS53. 29
49. That Committee participants provide any comment on the final draft of the updated model course V-103/3 by **6 September 2022** in order for the model course to be approved at VTS53. 29



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