



## IALA VTS COMMITTEE

# REPORT OF THE 47<sup>TH</sup> SESSION OF THE IALA VESSEL TRAFFIC SERVICES (VTS) COMMITTEE

23 to 27 September 2019  
IALA Headquarters

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Committee Secretaries

**27 September 2019**

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International Association of Marine Aids to Navigation and Lighthouse Authorities  
Association Internationale de Signalisation Maritime

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## Report of the 47<sup>th</sup> Session of the IALA Vessel Traffic Services (VTS) Committee

### Executive Summary

The 47<sup>th</sup> meeting of the VTS Committee was held from 23 to 27 September 2019 at IALA Headquarters with Monica Sundklev as Chair and Dirk Eckhoff as Vice-Chair. The Secretaries for the meeting were Thomas Southall and Kevin Gregory.

94 Participants from 26 countries, three Sister organisations participated in VTS47. 19 participants attended for the first time.

This was the third meeting for the 2018-2022 Work Programme and the VTS Committee considered 55 input papers and produced 24 output papers of three Working Groups.

Key outputs included:

- **Finalisation of the revision of IMO Guidelines for Vessel Traffic Services** – The Committee completed the revision of the IMO Guidelines for VTS (Resolution A.857(20)) and forwarded the document to the IALA Council for approval before submission to the IMO Navigation, Communications and Search and Rescue Sub-Committee (NCSR) (Task 1.1.1).  
The Committee was very grateful for the valuable input provided by a representative from the IMO Secretariat.
- **Completion of the revised Recommendation R0119 on the Implementation of Vessel Traffic Services and its associated Guideline on the Establishment of Vessel Traffic Services** – The Committee completed the separation of the existing Recommendation V-119 into a new shorter Recommendation and an associated Guideline in conformance with the new IALA document structure.
- **Completion of a new Guideline on VTS Training for Deck Officers** – The Committee completed a new Guideline to assist maritime training institutes and other interested stakeholders in the training of Deck Officers in VTS related matters.

The following liaison notes were prepared:

- To Council to request a new Work Programme item on the updating of key IALA documentation to coincide with the adoption of the revised IMO Guidelines on Vessel Traffic Services (revised Resolution A.857(20)).
- To the Legal Advisory Panel to obtain advice on the revisions to Chapter 4 of the IALA VTS Manual.



### 14<sup>TH</sup> IALA Symposium

Enhanced Maritime Safety and Efficiency by Connectivity  
25 - 29 May 2020 Rotterdam | Netherlands

**Overall status of the VTS Committee 2018-2022 Work Programme after VTS47:**

Task	Start Session	Planned End Session	Revised End Session	Progress Indicator			Status Overview
				Green	Yellow	Red	
<b>WG#1 – Operations</b>							
1.1.1	Revision of IMO Resolution A.857(20) Guidelines on Vessel Traffic Services	45	47				To Council for silent approval until 11 Oct 2019
1.1.2	Review and update V-119 on the Implementation of Vessel Traffic Services (R0119) (Output to be a revised Recommendation and associated Guideline)	47	50				Split into Rec and GL completed. Both to Council for approval. GL revision ongoing
1.1.3	<del>Develop guidance on training needs for those involved in the planning and implementation of a VTS, to be included in the new Guideline on the Establishment of VTS (task 1.1.2)</del>	48	49				To Council to note: merged with task 1.1.2
1.1.4	Develop Guideline on the Provision of Local Port Services (LPS)	45					Completed G1142 at VTS45
1.2.1	Review and update V-127 on Operational Procedures for Vessel Traffic Services (Output to be a revised Recommendation and associated Guideline)	45	51				Split into R0127 and G1141 completed GL Revision ongoing
1.2.2	Update Guideline 1110 on Decision Support Tools for VTS Personnel (take into account emerging concepts and technologies)	49	50				
1.2.3	Develop a Guideline for Promulgating the Requirements of a VTS to Mariners – A VTS Users Guide Template	45	46				Completed at VTS46
1.2.4	Develop Guideline on Maritime Services in the context of e-Navigation relating to VTS	45	50				
1.2.5	Develop a Guideline on the implications of maritime autonomous surface ships from a VTS perspective	50	51				
1.2.6	Develop Guideline on how to develop a safety culture in VTS	50	51				
1.2.7	<del>Develop Guideline on the development and implementation of VTS related MS's other than MS 1, 2 and 3</del>	46	48				To Council to note: merged with task 1.2.4.
1.2.8	Develop a IALA Reference List on IALA Documentation Relating to VTS	45					Continued update by Sec.
1.3.1	Develop Guideline on VTS Voice Communications, Phrases/Phraseology	45	48				
1.3.2	Develop Recommendation on Digital information transfer between ship and shore in VTS operations (Operational aspects)	50	51				
1.4.1	Update and publish the VTS Manual and develop related procedures for its future management	46	48				Coord Group established
1.4.2	Develop procedures for the ongoing management and conduct of the Global VTS Questionnaire	45	46	47			Coord. Group established
1.4.3	Prepare a "living document" on "Future VTS", including emerging technologies and human element	49	51				
1.4.4	<del>Produce a Guideline on preparing for Zero Accident Campaign</del>						No IMO response. Task discontinued

Task		Start Session	Planned End	Revised End	Progress Indicator		Status Overview
<b>WG#2 – Technology</b>							
2.1.1	Develop Guideline on the portrayal of VTS information and data (both operational and technical aspects).	45	48				
2.1.2	Develop Recommendation on Cyber-Security (lead ENG, all Committees via Workshop)	47	50				
2.2.1	Review and update Recommendation V-128 on Operational and Technical Performance of VTS Systems	48	51				
2.2.2	Review and update Guideline 1111 on Preparation of Operational and Technical Performance Requirements for VTS Systems	45	48				
2.2.3	Develop Guidance on the technical acceptance of a VTS system	45	46	48			Split into one general GL and one specific GL
2.3.1	Develop a Product Specification under the S-100 framework for VTS	45	47	49			
2.3.2	Review and update Recommendation V-145 on the Inter-VTS Exchange Format (IVEF) Service (Output to be a revised Recommendation and associated Guideline)	48	51				
<b>WG#3 – Training</b>							
3.1.1	Develop Guideline on human factors and ergonomics in VTS	46	49	51			External expertise call
3.2.1	Develop Guideline on the management of a VTS	45	49	50			Questionnaire for VTS 49
3.2.2	Review, update and reformat Guideline 1045 on Staffing Level at VTS centres	45	45				Completed at VTS45
3.3.1	Review and update V-103 on the Standards for Training and Certification of VTS Personnel and its associated Model Courses.	45	48	51			Questionnaire for VTS 48
3.3.2	Review and update Guideline 1017 on Assessment of Training Requirements for Existing VTS Personnel, Candidate VTS Operators, Revalidation of VTS Operator Certificates	47	50				
3.3.3	Produce a VTS Training Manual to complement V-103 and its model courses	48	51				To council to note : task deleted
3.4.1	Review and update Guideline 1014 on the Accreditation and Approval Process for VTS Training	48	51				
3.5.1	Develop guidance on VTS training for deck officers	45	46	47			To Council for approval

**Legend:**

**Green** – progress as planned

**Yellow** – task needs more time, target time prolonged

**Red** – task needs more time, may not be completed during this work period

Blank – task not started

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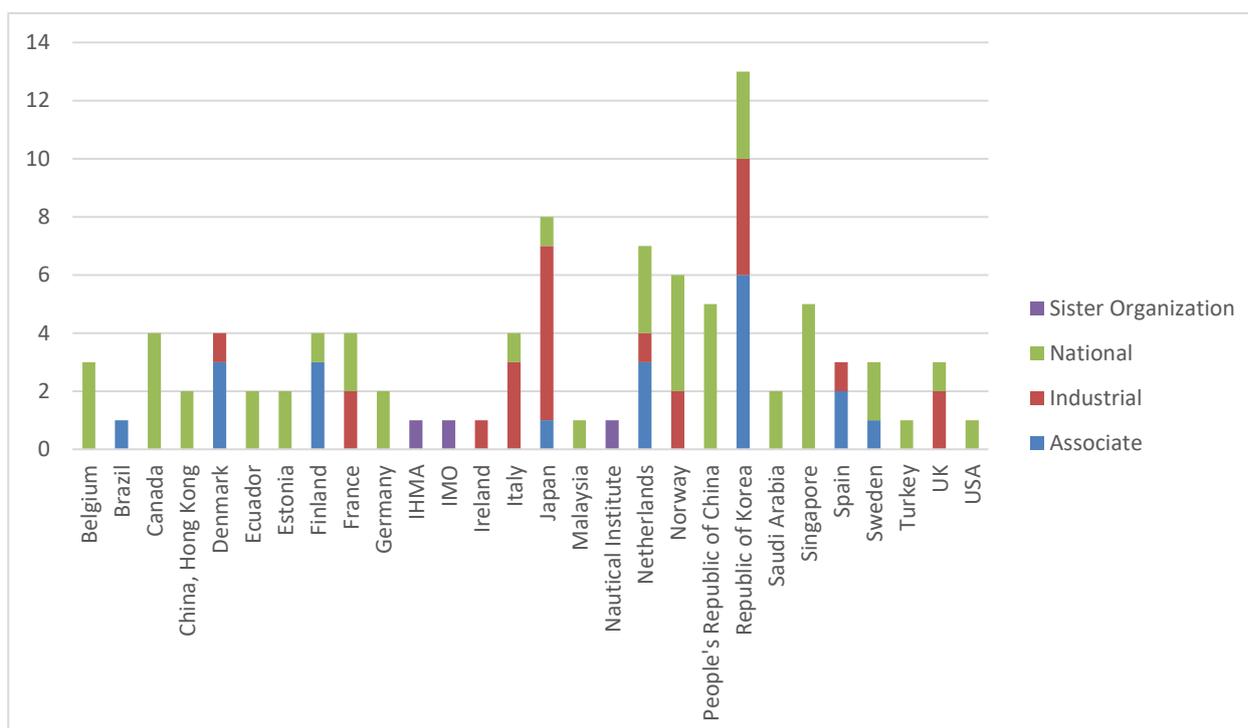
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## Report of the 47<sup>th</sup> meeting of the IALA Vessel Traffic Services (VTS) Committee

### 1. INTRODUCTION

The 47<sup>th</sup> meeting of the VTS Committee was held from 23 September to 27 September 2019 at IALA Headquarters with Monica Sundklev as Chair and Dirk Eckhoff as Vice-Chair. The Secretaries for the meeting were Kevin Gregory and Thomas Southall.

94 participants from 26 countries, three Sister Organizations participated in VTS47. 19 participants attended for the first time. A breakdown of the participants is shown in the graph below.



#### 1.1 Administrative announcements

The Committee Secretary provided all participants with a safety and administration briefing.

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.

## 1.2 Welcome from the Chair of the VTS Committee

The Chair of the VTS Committee, Monica Sundklev welcomed all participants to the 47<sup>th</sup> meeting of the VTS Committee and was happy to see so many participants. The Chair introduced Dirk Eckhoff, Vice-Chair of the VTS Committee and Kevin Gregory / Thomas Southall who served as the Committee Secretary.

The Chair expressed her thanks to the Republic of Korea for their expert help and assistance with the planning and implementation of the 46<sup>th</sup> VTS Committee meeting and the IALA Workshop on Harmonising VTS Voice Communication in Busan in February 2019. Both events were extremely successful, and a lot of progress was made on many work items.

The Chair encouraged all participants, both old and new, to share experiences and best practices in the working groups for the benefit of all IALA members.



## 1.3 Welcome from the Secretary-General

Francis Zachariae, Secretary-General of IALA welcomed all participants to Saint Germain-en-Laye and commented that it was wonderful to see everyone at IALA Headquarters for the first technical committee meeting of the autumn.

It will be a very busy week across all three working groups of the VTS Committee. However, there is a special task which is attracting attention from all around the world – the revision of IMO Resolution A.857(20) on *Guidelines for Vessel Traffic Services*. A significant amount of work has been undertaken in preparing the revised resolution and this will soon be presented to the IMO member States at the NCSR Sub-Committee in January 2020. It was pleasing to see a number of member States and Sister Organization co-sponsoring the submission of the revised resolution to the IMO. Additionally, the European Commission is working to support the progress of the revised resolution in some manner at the IMO.

Remarkable progress has been made in the preparation of the revised resolution by the VTS Committee and the hard work of the correspondence group lead by Neil Trainor from Australia and the IALA Secretariat. We all hope for a smooth passage for the revised resolution at the IMO which should then start another very interesting period for VTS with a new way of thinking.

The real work will begin now, in advance of the publication of the revised resolution you will need to modify many Recommendations, Guidelines and Model Courses to accommodate the changes, this will be a complicated and difficult task. However, this is a very important piece of work as the revised resolution will firmly point the way to the IALA Standards which you produce.

IALA is doing well, over the last 4 years we have been pleased to welcome over 50 new members and we have a family of 303 members at the moment. The newest industrial member, Marine Works from the Republic of Korea joined just one week ago and is participating in VTS47 this week.

There is an interesting agenda ahead in terms of IALA events. In November, e-Navigation Underway North America will be held in Tampa, Florida. This is an important event as VTS and e-Navigation are very closely linked – it is often said that VTS is the front office of e-Navigation. In May 2020, the first joint IALA VTS and E-

Navigation Symposium will be held in Rotterdam. Almost 100 abstracts have been received and scrutinised. All presentations will feature at the Symposium, some will be a presentation in plenary, some will have poster presentations and some will present their work on posters so you will have the chance to view and interact with many more presenters than before.

But before the Symposium a Diplomatic Conference will be held in Kuala Lumpur, Malaysia. This should be the final Diplomatic Conference where the participants will have the credentials from their respective Head of State to sign the final act of the new Convention for IALA paving the way for the change of status from a Non-Governmental Organization to an Inter-Governmental Organization. This will result in IALA gaining the same status as organisations such as the IMO and IHO.

VTS47 also coincides with the 2020 World Maritime Day – empowering women in the maritime community, which we will celebrate here.

The Secretary-General wished all participants a fruitful week and reminded everyone that the Secretariat was ready to help in any way possible.

#### **1.4 Approval of the agenda**

The agenda was reviewed and approved (VTS47-1.3.1).

#### **1.5 Introductions and apologies**

The Chair welcomed the new participants of the Committee. The apologies for absence that had been received by the Secretariat were noted (see Annex B).

#### **1.6 Programme for the week**

The Chair explained the programme for the week (VTS47-1.5.1) and the changes to it, which was adopted.

### **2. REVIEW OF ACTION ITEMS FROM VTS46**

Input paper VTS47-2.1.1 refers.

The Committee Secretary confirmed that all Secretariat and participant actions from VTS46 were completed.

The report of VTS46 (VTS47-2.1.2) was noted.

### **3. REVIEW OF INPUT PAPERS**

Input papers were noted and the Chair made a presentation which associated each input paper with its respective working group and task number (if appropriate) to assist participants in identifying which working group they wished to join. There had been some late input papers and the Chair reminded participants that it is important that the documents are available well in advance for both the Secretariat as well as for the Committee participants in order to be well prepared for the meeting. The Chair urged the participants to send in any input paper before the set deadline, as is announced in the invitation, or it may not be considered by the Committee.

Input paper with a proposal for urgent revision of Guideline 1089 – Provision of Vessel Traffic Services (INS, TOS & NAS (VTS47.3.1.7) was discussed in particular as it was considered to be revised added as a new task for the VTS Committee.

## 4. REPORTS FROM OTHER BODIES

### 4.1 IALA

#### 4.1.1 IALA Council 69

The Chair provided participants with a summary of the highlights of the 69<sup>th</sup> meeting of the IALA Council, held in Rotterdam between the 17 and 21 June 2019, which were of interest to the VTS Committee.

Participants were reminded of the forthcoming IALA VTS and e-Navigation Symposium to be held in Rotterdam, the Netherlands in 2020 and the IALA Conference to be held in Rio de Janeiro, Brazil in 2022.

Several Councillors provided updates on the national developments related to VTS. VTS expansion and modernisation were highlighted as a major area of interest to national Members. Cyber security was also highlighted as an issue and participants were reminded of the forthcoming IALA workshop on Cyber Security which will be held in Quebec, Canada, in October 2020.

The Councillor for The Netherlands suggested adding Maritime Autonomous Surface Ships (MASS) as a work item for the VTS Committee, for recommendations and guidelines to be developed. As a first step, it was agreed that the Councillor for The Netherlands in cooperation with the Secretariat should prepare a paper on the impact(s) of MASS on VTS, for consideration by the Council Strategy Drafting Group at its next meeting.

The Council reviewed the report of VTS46 and approved all of the output documents that were completed.

The Chair drew participants' attention to Guideline G1143 on Unique Identifiers for Maritime Resources which was approved at Council 69. The Guideline proposes that the use of unique identifiers is a necessary development of e-Navigation to maintain harmonization across domains and services. Navigationally, unique objects such as marine aids to navigation, VTS products and services and other maritime services require identification numbers to avoid duplication and misalignment of marine aids to navigation and maritime safety information.

Council 69 also conferred Honorary Membership to the former Chair of the VTS Committee Captain Tuncay Cehreli and former Committee participants Pieter Paap and Juan Francisco Rebollo.

#### 4.1.2 IALA Policy Advisory Panel

The 38<sup>th</sup> meeting of the Policy Advisory Panel was held between the 11 and 13 September 2019. In view of the short time interval between the meeting and the VTS Committee, the final report was not yet available. There were no matters of major significance arising from PAP38 for the VTS Committee to note.

### 4.2 IMO

Input paper VTS47-4.2.2 (IMO MSC 101) was noted by the Committee. In particular, the attention of Committee participants was drawn to the input paper MSC 101/23/11 on progress on the review of *the Guidelines for Vessel Traffic Services* (resolution A.857(20)) which was well received by the Maritime Safety Committee.

MSC 101 approved initial descriptions of Maritime Services in the context of e-navigation and the work in developing Maritime Services will continue also within the Facilitation Committee (FAL).

## 5. REPORTS FROM RAPPORTEURS

### 5.1 Correspondence Group on the revision of IMO Resolution A.857(20)

Rapporteur: Neil Trainor

Input papers VTS47-5.1.1, VTS47-5.1.2, VTS47-5.1.3, VTS47-5.1.4, VTS47-5.1.5 refer.

The Chair commented that the preparation of the revised IMO Resolution A.857(20) was a great challenge requiring the coordination of an intersessional correspondence group consisting of some 44 members great challenge. Neil progressed this challenge with excellent results. The Chair also thanked the Secretary to the

intersessional correspondence group, Thomas Southall who has been side by side with Neil to make sure the process was efficiently and effectively conducted.

The Rapporteur provided a general presentation to Committee participants to bring them up to date with the current status on the revision of the Resolution. A reminder was provided with respect to the original needs that were identified for the review of the Resolution and the timeline of the process, dating back to February 2018, was described. This included significant areas of work including an intersessional meeting of Working Group 1 of the VTS Committee, the establishment of an intersessional correspondence group and the conduct of a Seminar to bring together all stakeholders, particularly those that may not have previously been involved in the revision process.

The intersessional correspondence group worked effectively over 19 meetings with 44 members representing 24 organizations. The result of this work are contained in the input papers to VTS47, this includes a full comments register where all feedback received, and the response to it are recorded.

The Rapporteur briefed the Committee on the major changes between the current and revised Resolution and concluded by summarizing that the revised Resolution provides a:

- more effective instrument to implement VTS in a globally harmonized manner;
- clear link between SOLAS, the Resolution and the IALA Standards; and
- future proof instrument that is not confusing to stakeholders.

Neil Trainor also referred to the valuable advice and guidance provided by the Legal Advisory Panel which greatly assisted the development of the revised Resolution.

## 5.2 Coordination Group on the IALA VTS Questionnaire

Rapporteur: Neil Trainor

The Coordination Group on the IALA VTS Questionnaire had met but could not progress significantly as, despite a request to the Committee participants for support in the technical hosting and management of the questionnaire, no offers had been forthcoming. Therefore, it was unclear as to whether it may be possible to run the questionnaire before the forthcoming VTS and ENAV Symposium.

## 5.3 VTS Manual Coordination Group

Rapporteur: Neil Trainor

The VTS Manual Coordination Group had progressed their work ahead of publication at the VTS and ENAV Symposium in 2020. A framework for the VTS Manual had been prepared and the process of updating some of the chapters had commenced.

### *Action Item:*

*That **Committee participants** were welcome to provide photos and comments on the VTS Manual within the scope of the agreed terms of reference. The full content of the VTS Manual will be available on a dedicated file sharing space with the username: VTS Manual and password: Onto2020! Photos and comments should be sent to IALA Secretariat*

## 6. PRESENTATIONS

### 6.1 IALA World-Wide Academy

Paper VTS47-6.1 (presentation) refers.

The presentation was given by Kevin Gregory and gave an overview of the activities of the IALA World-Wide Academy related to VTS. It was emphasised that the World-Wide Academy is an integral part of the IALA Secretariat and that a large part of its mission was to promote the work of the VTS Committee. An update was provided on the IALA World-Wide Academy activities and plans related to education and training, capacity building and research and development in the VTS domain.

### 6.2 Detection of near misses and dynamic hotspots

Paper VTS47-6.2 (presentation) refers.

The presentation was made by Ryan Sim and Hiraku Fujimoto related to the role of ICT and human factors in helping recognition and judgment in developing near miss and dynamic hotspot situations.

### 6.3 The European Coast Guard Function Academies NET Project / VHF Communication Training Course

Paper VTS47-6.3 (presentation) refers.

The presentation was given by Barbara Magro and Carlos Salinas and was related to the establishment of European Coast Guard training framework using VTS VHF Communication Training as an example of the sharing of expertise across Europe.

### 6.4 The Nautical Institute Proposal on Auditing Assessment on VTS Training

Paper VTS47-6.4 (presentation) refers.

The presentation was provided by Jillian Carson-Jackson with respect to The Nautical Institutes scheme of accreditation for VTS training. The scheme proposes the provision of audit services to competent authorities to assist in the accreditation VTS training organisations and the approval of the model courses that they seek to deliver.

### 6.5 Coping with complexity in a VTS

Paper VTS47-6.5 (presentation) refers.

The presentation was provided by Tore Relling which described studies seeking to identify how VTS operators use their expert knowledge and strategies in their interaction with vessels and to examine if there are variations in the interaction with vessels between different operators.

### 6.6 Capacity Building in the ASEAN Region VTS Training Centre

Paper VTS47-6.6 (presentation) refers.

The presentation was provided by Tamotsu Ikeda with respect to the work undertaken by the ASEAN Region VTS Training Centre in Kuala Lumpur, Malaysia with respect to VTS training and their future plans for further training developments.

## 7. WORK PROGRAMME 2018-2022

The Committee reviewed and noted the Council approved work plan (VTS47-7.1.1), the VTS Committee task plan and task register (VTS47-7.1.2 and VTS46-7.1.3).

## 8. ESTABLISH WORKING GROUPS

The Chair outlined the procedure to be followed by working groups, including the associated paperwork and description of IALA support, after which three working groups were established and their tasks outlined. A list of working group participants is at Annex C.

Working Group (WG)	Working Group Chair / Vice-Chair
WG1 – Operations	Trond Ski (Chair), Else Bogaert (Vice-Chair)
WG2 – Technology	Robert Townsend (Chair), Richard Aase (Vice-Chair)
WG3 – VTS Training	Barbara Magro (Chair), Stefaan Priem (Vice-Chair)

The Chair informed about the changes to the Chair's position of WG3 where Mrs Lilian Bieber unfortunately could not continue to attend VTS Committee meetings due to changes in her work position. The Committee acknowledged Lilian's dedicated work within the VTS Committee and she will truly be missed. The Committee wished her all the best for the future and also welcomed Barbara Magro as new Chair of WG3 together with Stefaan Priem as Vice-Chair.

## 9. WORKING GROUP 1 – OPERATIONS (WG1)

41 participants joined Working Group 1 - Operations at VTS47.

During the session, Working Group 1 progressed 5 of the 11 remaining tasks assigned under the 2018 – 2022 Work Programme. Task 1.1.1 was finalized by members of the IALA Correspondence group on Resolution A.857(20). Working Group 1 produced 5 output papers and three working papers for the Committee Secretary to progress.

### 9.1 Task 1.1.1 Revision of IMO Resolution A.857(20) Guidelines for Vessel Traffic Services

VTS46 requested the correspondence group to progress Task 1.1.1. The Group held a total of 19 meetings and delivered a revised resolution as an input paper to VTS47 (VTS47-5.1.2). During VTS47 members of the correspondence group gathered to consider the following input papers:

- VTS47-8.2.2 WP Guiding Principles for drafting the revised new resolution A.857(20)
- VTS47-8.2.2.1 WP Work programme for completing the revision of resolution A.857(20)
- VTS47-8.2.2.2 WP Draft Revised Resolution – Guidelines for VTS
- VTS47-5.1.1 Report from IALA Correspondence Group (A.857 Revision)
- VTS47-5.1.2 Revised New Resolution Version 3
- VTS47-5.1.3 ICG Response to Collated Comments on Draft Revision
- VTS47-5.1.4 LAP Liaison Note to VTS 47 re VTS Guidelines
- VTS47-5.1.5 Report of the IALA Seminar on the Revision of IMO Resolution A.857(20) Guidelines for VTS

Through some final adjustments and editorial changes, the Committee completed task 1.1.1, revision of IMO Resolution A.857. In completing the revision, the Committee expressed its thanks to Javier Yasnikouski (Maritime Safety Division, IMO) for his active engagement and counsel in this task. The Committee agreed that the covering note, that would accompany the draft assembly resolution submission to NCSR7, would be finalized by the IALA Secretariat. The Committee also expressed its gratitude to the correspondence group for the hard work and dedication, especially to the chair Neil Trainor and the secretary Tom Southall.

Also related to task 1.1.1, the Committee considered input paper VTS47-3.1.7 Proposal for new task - revision of Guideline 1089 on VTS from the IHMA. The paper highlights the need to revise Guideline 1089 - Provision of Vessel Traffic Services (INS, TOS & NAS), and other documents, in connection with the adoption of a revised IMO Resolution. Initiated by the document, the Committee conducted a top-level review and drafted a note to Council requesting the approval of a new task to update Guideline 1089 and to note that further documents may require updating. A spreadsheet of all documentation in need of revision is enclosed to the note.

**Action items:**

*The IALA Secretariat is requested to forward the revised resolution A.857(20) (VTS47-13.2.1) to Council for approval.*

*The IALA Secretariat is requested to forward the revised resolution A.857(20) (VTS47-13.2.1) to potential co-sponsor of the submission to NCSR7.*

*The IALA Secretariat is requested to forward the update of IALA VTS documentation post adoption of the revised IMO resolution on vessel traffic services (VTS47-13.2.1 and VTS47-13.2.2) to Council for their consideration.*

## 9.2 Task 1.2.1 Review and update V-127 on Operational Procedures for Vessel Traffic Services

During VTS47 the Working Group continued with the review and update of Guideline G1141 on Operational Procedures for VTS. The Guideline now reflects new and amended IALA documentation approved since 2011. With this, the Guideline will provide effective guidance to assist Competent Authorities and VTS Authorities to implement and operate VTS in a globally harmonized manner.

**Action items:**

*The IALA Secretariat is requested to forward the review of Guideline G1141 on Operational Procedures for VTS (VTS47-13.3.1) as a working paper to VTS48.*

**Committee Participants** are invited to forward any comments on Guideline G1141 on Operational Procedures for VTS (VTS47-13.3.1) as an input paper to VTS48.

## 9.3 Task 1.1.2 Review and Update V-119 on the Implementation of Vessel Traffic Services.

Using the new IALA document structure, the Committee split the current Recommendation V-119 into a new Recommendation R0119 and a new Guideline on the Establishment of Vessel Traffic Services. Furthermore, the Committee progressed the review of the new Guideline and initial amendments have been made although a more comprehensive review will continue at VTS48.

**Action items:**

*The IALA Secretariat is requested to forward the draft Recommendation on the Implementation of Vessel Traffic Services (R0119) (VTS47-13.2.7) to Council for approval.*

*The IALA Secretariat is requested to forward the draft Guideline on Establishment of Vessel Traffic Services (VTS47-13.2.7) to Council for approval.*

## 9.4 Task 1.2.4 Develop Guideline on Maritime Services in the Context of e-Navigation Relating to VTS and Task 1.2.7 Develop Guideline on the Development and Implementation of VTS Related MSP's Other than MSP 1, 2 and 3.

During VTS47 the Committee reviewed the following input papers regarding task 1.2.4:

- VTS47-3.1.6 Maritime Services - review of tasks 1.24 & 1.27
- VTS47-8.2.1 WP Draft guideline on Maritime Services (VTS46-13.3.1)
- VTS47-8.2.1.1 WP Appendix 1 MS 1-3\_merged revised WG 1 (VTS46-13.3.1.1)

In order to conduct further development of the Guideline on Maritime Services in line with what is expected to be the outcome of IMO NCSR7 on the revision of Resolution A.857(20), the Committee decided to postpone the work on task 1.2.4 until VTS48.

Regarding task 1.2.7, the Committee discussed the objectives of the task and concluded that there is no need for a new Guideline on the Development and Implementation of VTS related MS's other than MS 1, 2 and 3. The Committee considered that it would be more appropriate to include descriptions of VTS related MS's in relation to other MS's, in the Guideline on Maritime Services developed under task 1.2.4. Based on this, the Committee propose to delete task 1.2.7 from the 2018 – 2022 Work Programme and merge it with task 1.2.4.

**Action items:**

*The IALA Secretariat is requested to forward draft guideline on Maritime Services (VTS47-8.2.1) as a working paper to VTS48.*

*The IALA Secretariat is requested to forward the Council Input Paper proposed changes to VTS committee tasks (VTS47-13.2.8) to Council for their consideration.*

### 9.5 Task 1.3.1 Develop Guideline on VTS Voice Communications, Phrases/Phraseology

The Committee continued to draft the guideline on VTS Voice Communication Phrase/Phraseology, introducing key words and standardized phrases based on common VTS scenarios to support clear and concise information exchange. The Committee considered the followed input papers:

- IALA Workshop on Harmonising VTS Voice Communication Draft Report
- VTS47-3.1.9 Proposal for the Amendment to the draft Guideline on VTS Voice Communications Phraseology relating to emergency scenarios
- VTS47-3.1.15 Draft Guideline on VTS Phraseology - Cover Note
- VTS47-3.1.15.1 Draft Guideline on VTS Phraseology
- VTS47-8.3.1 WP draft Guideline on VTS Voice Communications Phraseology task 1.3.1

The input paper received from Australian Maritime Safety Authority (AMSA) was discussed and compared with the previous working paper. The emergency scenarios input received from China Maritime Safety Administration (MSA) was also considered and discussed. The work will be continued and is expected to be finalized at VTS48.

**Action items:**

*The IALA Secretariat is requested to forward the draft guideline on VTS Voice Communications, Phrases/Phraseology (VTS47-13.3.11) as a working paper to VTS48.*

### 9.6 Task 1.4.1 Update and publish the VTS Manual and develop related procedures for its future management

The Coordination Group for the revision of the VTS Manual had a productive meeting during the week where the Framework for 2020 Manual was updated and responsibilities for the different chapters were appointed. A liaison note was prepared to send to the Legal Advisory Panel (LAP) for their further review and advice on Chapter 4 Regulatory and legal framework.

The Group agreed to continue work intersessional and the next teleconference meeting will be a GoToMeeting held on the 18 November 2019 at 10.00 CET.

**Action items:**

*The IALA Secretariat is requested to forward the liaison note VTS47-13.2.3 and its annex VTS47-13.2.3.1 to LAP for their consideration on Chapter 4 Regulatory and legal framework of the VTS Manual.*

*The IALA Secretariat is requested to send invitations to the Coordination Group on the revision of the VTS Manual for a GoToMeeting on the 18 November 2019 at 10.00 CET.*

## 9.7 Task 1.4.2 Develop procedures for the ongoing management and conduct of the Global VTS Questionnaire

During the initial plenary session the Chair asked the participants whether there was any data base expert who could assist with an analysis on the possible actions and implications for moving the databases containing the VTS Questionnaire and administer them. Mr Ernest Batty from Senro/IMIS Global Limited approached the Chair and volunteered to give a professional opinion on the matter. During VTS47 a couple of meetings were held to clarify the situation and the requirements to be expected. Mr. Batty agreed to specify the actions and requirements in writing to coordinator Neil Trainor for further consideration by the IALA Secretariat. A specific teleconference meeting with the previous data administrator for the VTS Questionnaire and Mr. Batty was proposed, which the coordinator, Mr. Neil Trainor, offered to organize.

### *Action items:*

*That **Ernest Batty** is requested to specify in writing to the coordinator ([neil.trainor@amsa.gov.au](mailto:neil.trainor@amsa.gov.au)) the actions and requirements needed for the data bases of the VTS Questionnaire to be moved elsewhere.*

*That **Neil Trainor**, as coordinator for the VTS Questionnaire, is requested to forward the written report from Mr. Batty to IALA Secretariat for their further consideration on hosting the data bases of the IALA VTS Questionnaire on a local server.*

*That **Neil Trainor** is requested to arrange a teleconference meeting with the previous data administrator and Mr. Batty and report the outcome of the meeting to IALA Secretariat.*

## 9.8 Task 1.1.3 Develop a guideline on training needs for those involved in the planning and implementation of a VTS

During the revision of Recommendation V-119, the Committee identified similarities between task 1.1.2, Review and Update V-119 on the Implementation of Vessel Traffic Services, and task 1.1.3. The Committee found that the most logical solution to this would be to incorporate guidance on training needs for those involved in the planning and implementation of a VTS, into a new Guideline on Establishment of VTS once it is reviewed. Based on this the Committee decided to rename task 1.1.3 into “Develop guidance on training needs for those involved in the planning and implementation of a VTS, to be included in a new Guideline on the Establishment of VTS”.

### *Action items:*

*The **IALA Secretariat** is requested to rename task 1.1.3 to ‘Develop guidance on training needs for those involved in the planning and implementation of a VTS, to be included in a new Guideline on the Establishment of VTS’.*

## 10. WORKING GROUP 2 – TECHNOLOGY (WG2)

### 10.1 Introduction

At VTS47, 30 attendees joined the Working Group. The Working Group have 7 formal tasks in the working period 2018-2022. The following tasks were addressed at VTS47:

- 2.1.1 Develop a guideline on portrayal of VTS information and data,
- 2.2.2 Review and update Guideline 1111 on preparation of Operational and Technical performance requirements for VTS Systems,
- 2.2.3 Develop a guideline on technical acceptance of a VTS system,
- 2.3.1 Develop a Data Model for Digital Information Services for VTS,
- 2.1.2 Recommendation for Cyber Security lead by ARM.

Additionally, the Working Group had 8 papers to review, however only one of these documents needed a formal response (VTS47-3.1.5 IALA Workshop on Cyber Security).

After presenting these tasks the Working Group discussed the approach to the management of these them and agreed a plan for the week. Essentially, five sub-groups were created along similar lines to the previous sessions.

The Working Group produced 2 liaison notes and 7 working documents.

#### 10.1 Task 2.1.1 Develop a guideline on portrayal of VTS information and data

The Working Group implemented the results of the GAP analysis carried out in VTS46, by amending G1105. This will be continued at VTS48.

##### *Action Item:*

*The IALA Secretariat is requested to forward the draft guideline G1105 on portrayal of VTS information and data (VTS47-13.3.9) as a working paper to VTS48.*

#### 10.2 Task 2.2.2 Review and update Guideline 1111 on preparation of Operational and Technical performance requirements for VTS Systems

The Working Group continued the ongoing task to review and update, by further re-ordering the radar section and reducing the overall size of the guideline.

##### *Action Item:*

*The Committee Secretary is requested to forward the draft Guideline 1111 on the Preparation of Operational and Technical Performance Requirements for VTS Systems (VTS47-13.3.4) as a working paper to VTS48.*

#### 10.3 Task 2.2.3 Develop a guideline for acceptance of VTS systems

The Working Group built on the progress from VTS46, and have now completed the main high level Guideline, and work will continue on the accompanying complex systems guideline intersessional between 3 and 5 December 2019, kindly hosted at TERMA premises in Aarhus, Denmark and for further development at VTS 48.

The intersessional meeting will be chaired by Richard Aase, vice-Chair of WG2. Bente Nedergaard, TERMA, will be the point of contact and can provide support with hotel and travel information etc. It should be noted that confirmation on the attendance is needed and in order to have access to TERMA premises, a valid passport needs to be presented.

##### *Action Items:*

*The IALA Secretariat is requested to forward the draft Guideline on acceptance for VTS systems (VTS47-13.3.5) as a working paper to VTS48.*

**Committee Participants** are requested to confirm their attendance to the intersessional meeting on 3-5 December 2019 concerning developing guidance for acceptance of VTS systems to Bente Nedergaard (bnn@terma.com) by 19 November 2019.

**Richard Aase** is requested to forward the result of the intersessional work to VTS48.

#### 10.4 Task 2.3.1 Develop a data model for digital information services for VTS

Discussions were held within the VTS Committee to re-assess the desired outcome from this task and to ensure it captures user requirements. As a result, a joint group was set up comprising Working Group 1 and Working Group 2 to review the input papers from the Republic of Korea (VTS47-3.1.16 and VTS47-3.1.16.1 on INS product specification) together with the working papers from VTS46. The task was retitled to “Develop a Product Specification under the S-100 Framework for VTS” and as a consequence, the Committee requested that S-212 is assigned to this Product Specification. Additionally, the Committee needs to ensure that such a Product Specification aligns to an overall architecture.

##### *Action Item:*

The **IALA Secretariat** is requested to forward the four working documents (Draft Product Specification VTS47-13.3.2, working notes on joint session between Working Group 1 and Working Group 2 (VTS47-13.3.2.3) together with the input documents from the Republic of Korea (VTS47-13.3.2.1 and VTS47-13.3.2.2) as working papers to VTS48.

The **IALA Secretariat** is requested to rename task 2.3.1 to “Develop a Product Specification under the S-100 Framework for VTS”.

#### 10.5 Task 2.1.2 Develop Recommendation on Cyber-Security (lead ENG, all Committees via Workshop)

The Working Group discussed input papers VTS47-3.1.5 on IALA Cyber Security Workshop and VTS47-3.1.10 from the China Maritime Safety Administration on Cyber Security.

Some adjustments were made to the China MSA paper, which could be relevant to the 2020 Workshop, which were included in a liaison note for the IALA Steering Committee of the Cyber Security Workshop and ARM.

The Working Group noted that it is ARM and not ENG who are leading this task. As a consequence, the task has been retitled to “Develop Recommendation on Cyber-Security (lead ARM, all Committees via Workshop)”

##### *Action Item:*

The **IALA Secretariat** is requested to forward the liaison note on the IALA Workshop on Cyber Security (VTS47-13.2.4 to ARM and the IALA Steering Committee of the Workshop on Cyber Security.

#### 10.6 Additional papers

The Working Group reviewed and noted the following input papers:

- VTS47-3.1.1 Liaison to ARM and VTS - Maritime Services in the context of e-Navigation (ENAV23-12.1.3).
- VTS47-3.1.1.1 a lay-persons description of e-Navigation (ENAV23-12.1.4). A liaison note has been submitted.
- VTS47-3.1.2 Liaison Note to ARM and VTS on R-Mode (ENAV23-12.1.13).
- VTS47-3.1.2.1 R-Mode Stakeholder Requirements (ENAV23-12.1.15).

##### *Action Item:*

The **IALA Secretariat** is requested to forward the liaison note on a lay-persons description of e-Navigation (VTS47-13.2.5) to the ENAV Committee.

## 11. WORKING GROUP 3 – VTS TRAINING (WG3)

### 11.1 Introduction

Eight participants joined Working Group 3 – VTS Training at VTS47. The Working Group progressed on five of the seven remaining tasks of which one was completed. The following tasks were addressed at VTS47:

- 3.1.1 - Develop Guideline on human factors and ergonomics in VTS
- 3.2.1 - Develop Guideline on the management of a VTS
- 3.3.1 - Review and update V-103 on the Standards for Training and Certification of VTS Personnel and its associated Model Courses.
- 3.3.2 - Review and update Guideline 1017 on Assessment of Training Requirements for Existing VTS Personnel, Candidate VTS Operators, Revalidation of VTS Operator Certificates
- 3.3.3 - Produce a VTS Training Manual to complement the V-103 and its model courses
- 3.4.1 - Review and update Guideline 1014 on the Accreditation and Approval Process for VTS Training
- 3.5.1 - Develop guidance on VTS awareness for deck officers

### 11.2 Task 3.1.1 Develop Guidance on Human Factors in VTS

Within the Working Group there were no participants with specific competencies in human factors. It was therefore agreed to prepare a document, to be addressed to external experts summarising the work done and the approach to the guideline that is requested.

#### *Action item:*

*That **Committee participants** are requested to forward the Liaison note (VTS47-13.3.7) Request for input – Guidance on Human Factors and Ergonomics, to human factor experts and provide feedback to VTS48.*

### 11.3 Task 3.2.1 Develop guideline on the management of a VTS

The Working Group revised the questionnaire on the managerial tasks within a VTS (VTS47 – 10.2.3).

#### *Action item:*

*The **IALA Secretariat** is requested to investigate, with the Working Group Chair and Vice Chair, the options for the provision of a questionnaire on the management of a VTS addressed to VTS Committee members.*

### 11.4 Task 3.3.1 Review and update Recommendation R0103 on the Standards for Training and Certification of VTS Personnel and associated Model Courses

The Working Group reviewed the outcomes from VTS46 and progressed the work. An extension is needed for this task to VTS51.

The Working Group undertook a detailed review of Recommendation R0103 and identified areas for further work. The structure of the Recommendation needs to be revised in order to reflect the new IALA document structure. Therefore, the current annex of the Recommendation needs to be changed into guidelines. It was agreed to work intersessional with a GoToMeeting planned for 16 December 2019, where broad participation is encouraged. Jillian Carson Jackson will be the point of contact for the GoToMeeting.

Work continued on the revision of Model Course V-103/1. The structure of an investigation process to determine the validity and relevance of each competence element of the modules of the Model Course has been drafted by AMSA. This process is expected to be launched well in advance of VTS48 to the VTS Committee participants for their consideration.

#### Action Items:

The **IALA Secretariat** is requested to investigate, with the Working Group Chair and Vice-Chair, the options for the provision of a questionnaire on the content of IALA Model Course V-103/1 addressed to interested stakeholders and provide input to VTS48, as appropriate.

**Committee Participants** are requested to provide comments on the current version of IALA Recommendation R0103 to the intersessional GoToMeeting to be held on 16 December.

**Committee Participants** are requested to participate in the intersessional GoToMeeting on the update of IALA Recommendation R0103, planned to be held on the 16 December 2019 and confirm their attendance to jillian@jcgconsulting.net by 9 December 2019.

#### 11.5 Task 3.5.1 Develop guidance on VTS Awareness for Navigating Officers

The Working Group completed the task having reviewed the input papers provided by the China MSA (VTS47-3.1.8) and The Nautical Institute (VTS47-3.1.11) as well as input from the participants during the week.

The title of the document was changed to "VTS training for Deck Officers". Additionally, several changes were made to the content of the document to make it more comprehensive and in line with the SOLAS and STCW Conventions.

#### Action Item:

The **IALA Secretariat** is requested to forward the draft IALA Guideline on VTS training for Deck Officers (VTS47-13.2.6) to Council for approval.

#### 11.6 Task 3.3.2 Review and update Guideline 1017 on Assessment of Training Requirements for Existing VTS Personnel, Candidate VTS Operators, Revalidation of VTS Operator Certificates

The Working Group reviewed and updated the task register related to this task.

#### 11.7 Task 3.3.3 Produce a VTS Training Manual to complement the V-103 and its model courses

The objective of task 3.3.3 was to produce a VTS Training Manual to complement IALA Recommendation R0103 (V-103) and its associated model courses. The Committee reviewed the scope of this task and agreed that there was no longer a need for a VTS Training Manual as all VTS training documentation now is available digitally and spread throughout the maritime world. Additionally, the IALA VTS Manual includes sections on VTS training and makes clear reference to all relevant IALA training documentation. The Committee therefore proposes that the task should be deleted.

#### Action Item:

The **IALA Secretariat** is requested to forward the Input Paper (VTS47-13.2.8) on the changes to the VTS Committee tasks (deletion of task 3.3.3 on produce a VTS Training Manual) to Council for their consideration.

#### 11.8 Task 3.4.1 Review and update Guideline 1014 on the Accreditation and Approval Process for VTS Training

The Working Group will commence this task at VTS48. In preparation for VTS48 the Working Group requests that research is undertaken by the World-Wide Academy on the worldwide implementation of procedures on the accreditation and approval process for VTS training.

#### Action Item:

The **IALA World-Wide Academy** is requested to undertake research on the implementation of accreditation and approval processes for VTS training and to provide input to VTS48.

## 12. WORK PROGRAMME (2018 – 2022)

Input paper VTS47-7.1.2 shows the list of tasks for the VTS Committee derived from the Council approved work programme 2018 – 2022. An extended description of all VTS tasks can be found in the VTS Task Register, VTS47-7.1.3. Both documents were reviewed, amended and updated during the meeting and will be used for developing the tasks at future VTS Committee meetings. It is not needed to obtain Council approval for updates of the Task List and Task Register such as name changes, but IALA Secretariat will inform Council of the changes. However, other significant changes to a task such as deletion should be approved by Council. New editions of both documents are working documents and will be forwarded to VTS48 for further use and development. An overall status report of the tasks can be found in the executive summary.

### *Action item:*

*The IALA Secretariat is requested to forward the VTS Task List (2018 – 2022) (VTS47-7.1.2) and the Task Register (2018 – 2022) (VTS47-7.1.3) as working papers to VTS48.*

## 13. REVIEW OF OUTPUT AND WORKING PAPERS

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

The output documents listed at Annex E were reviewed and agreed.

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

## 14. ANY OTHER BUSINESS

### 14.1 IMO World Maritime Day 2019

The theme for the International Maritime Organization World Maritime Day 2019 is empowering women in the maritime community. World Maritime Day was celebrated on Thursday 26 September 2019 by the Committee and the women participants to VTS47.



## 14.2 NAVGUIDE review and update

IALA PAP document PAP38-5.11.4, as provided by the IALA Secretariat was reviewed. The document provides a publication plan for NAVGUIDE 2022, noting the area of responsibility for the VTS Committee. The NAVGUIDE Coordinator, J. Carson-Jackson, agreed to review the work plan for Chapter 5 – Vessel Traffic Services. In line with the requirements as provided in 5.11.4 a draft chapter outline, with initial contents as per the existing NAVGUIDE, will be prepared as input to VTS48, noting the contact for the secretariat is Minsu Jeon.

### *Action item:*

**J Carson-Jackson** to prepare a draft revision of the IALA NAVGUIDE, Chapter 5, as input for VTS48.

## 15. REVIEW OF SESSION REPORT

The report of the meeting (VTS47-14.1) was reviewed by the Committee on 27 September 2019. The report was agreed to in principle and will be open to comment until 4 October 2019.

### *Action Item:*

*The IALA Secretariat is requested to forward the report of VTS47 (VTS47-14.1) to the IALA Council, to note after 4 October 2019.*

## 16. DATE AND VENUE OF NEXT MEETINGS

VTS48 will be held between 2 and 6 March 2020 at IALA Headquarters, Saint Germain-en-Laye, France.

Committee participants were reminded of the following IALA events:

- IALA Workshop on the future of Marine Radio Beacon DGNS to be held between the 27 and 31 January 2020 in Edinburgh, United Kingdom.
- The combined VTS and ENAV Symposium to be held between the 25 and 29 May 2020 in Rotterdam, the Netherlands. Registration will be open soon via the symposium website - [www.iala-rotterdam2020.nl](http://www.iala-rotterdam2020.nl).
- Joint IHO/IALA workshop on S-100/S-200 development and portrayal in June 2020 in Norway.
- IALA Workshop on Cyber Security to be held between the 26 and 30 October 2020 in Quebec, Canada.

Other IALA events will be publicised on the IALA website.

## 17. CLOSING OF THE MEETING

The Chair thanked again all Committee participants for all the hard work and valuable progress made in all the tasks during the meeting especially with the finalization of task 1.1.1 and the revision of Resolution A.857(20). She hoped that the proposal would have great support by IALA Members at IMO and reminded participants who may wish to co-sponsor the submission to IMO to respond to IALA Secretariat before 10 October 2019.

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.

Finally, the Chair asked if there were any final comments that members wished to make; there were none, at which she hoped to meet all once again during VTS48. She wished everyone a pleasant stay and safe journey home.

## 18. LIST OF ANNEXES

### 1 Agenda

A copy of the agenda is at Annex A.

### 2 Participants

A list of participants is at Annex B.

### 3 Working Group Participants

A list of working group participants is at Annex C.

### 4 Input Papers

A list of input papers is at Annex D.

### 5 Output and Working papers

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

### 6 Action Items

A list of action items is at Annex F.



## 47<sup>th</sup> Meeting of the Vessel Traffic Services Committee (VTS47)

The 47<sup>th</sup> meeting of the **VTS Committee** will be held from 23 – 27 September 2019, at IALA Headquarters, Saint-Germain-en-Laye, France.

The opening plenary will commence at 1300 on Monday 23 September 2019, and the closing plenary will end at approximately 1300 on Friday 27 September.

Committee Chair, Vice-Chair and Working Group Chairpersons are requested to meet at 0900 on Monday 23 September.

### Agenda

1. Introduction
  - 1.1. Administration and Safety Briefing
  - 1.2. Welcome from the Secretary-General/Deputy Secretary-General
  - 1.3. Approval of agenda
  - 1.4. Apologies and introductions
  - 1.5. Programme for the week
2. Review of action items from last meeting
  - 2.1. Review of action items from VTS46
3. Review of input papers
  - 3.1. Review of input papers to VTS 47
  - 3.2. Input papers for action/allocation
4. Reports from other bodies:
  - 4.1. IALA
    - 4.1.1. IALA Council
    - 4.1.2. IALA Policy Advisory Panel (PAP)
  - 4.2. IMO
    - 4.2.1. IMO Council
    - 4.2.2. IMO MSC
    - 4.2.3. IMO NCSR
5. Reports from rapporteurs
  - 5.1. Revision of the IMO Res. A.857(20) Neil Trainor
  - 5.2. Update on IALA VTS-ENAV Symposium 2020 Maarten Berrevoets
  - 5.3. Coordination Group on the VTS Questionnaire Neil Trainor
  - 5.4. VTS Manual Coordination Group Neil Trainor
6. Presentations

- |       |   |                                |
|-------|---|--------------------------------|
| 6.1.  | IALA World-Wide Academy   | Kevin Gregory                  |
| 6.2.  | Detection of near misses and dynamic hotspots   | MPA Singapore                  |
| 6.3.  | The European Coast Guard Function Academies NET Project / VHF Communication Training Course | Barbara Magro / Carlos Salinas |
| 6.4.  | The Nautical Institute Proposal on Auditing Assessment on VTS Training                      | Jillian Carson-Jackson         |
| 6.5.  | Coping with complexity in a VTS   | Trond Ski / Tore Relling       |
| 7.    | Work Programme (2018 - 2022)  |                                |
| 8.    | WG1 - Operations  |                                |
| 8.1.  | VTS Implementation  |                                |
| 8.2.  | VTS Operations  |                                |
| 8.3.  | VTS Communications  |                                |
| 8.4.  | VTS Manual and VTS Questionnaire  |                                |
| 8.5.  | IALA Questionnaire  |                                |
| 9.    | WG2 - Technology  |                                |
| 9.1.  | VTS Data and Information Management   |                                |
| 9.2.  | VTS Technology  |                                |
| 9.3.  | Data Models and Data Encoding   |                                |
| 10.   | WG3 - VTS Training  |                                |
| 10.1. | VTS Implementation  |                                |
| 10.2. | VTS Operations  |                                |
| 10.3. | Training and Assessment   |                                |
| 10.4. | Competency, certification and revalidation  |                                |
| 11.   | Any Other Business  |                                |
| 12.   | Establish Working Groups  |                                |
| 13.   | Review of output and working papers   |                                |
| 13.1. | Working Group reports   |                                |
| 13.2. | Output papers   |                                |
| 13.3. | Working papers  |                                |
| 14.   | Review of session report  |                                |
| 15.   | Date and venue of next meeting  |                                |
| 16.   | Close of the meeting  |                                |

**ANNEX B VTS47 PARTICIPANTS**
**Country**

<b>VTS Chair</b>	<b>Swedish Transport Agency</b> Ms Monica SUNDKLEV Sweden e-mail                      monica.sundklev@transportstyrelsen.se
<b>VTS Vice-Chair</b>	<b>Federal Waterways &amp; Shipping Administration</b>  Mr Dirk ECKHOFF Germany e-mail                      dirk.eckhoff@wsv.bund.de
<b>WG1 Chair</b>	<b>Norwegian Coastal Administration</b>  Mr Trond SKI Norway e-mail                      trond.ski@kystverket.no
<b>WG1 Vice-Chair</b>	<b>Agency for Maritime Services and Coast - Flemish Government</b>  Ms Els BOGAERT Belgium
<b>WG2 Chair</b>	<b>Maritime Coast Guard Agency</b>  Mr Robert TOWNSEND UK e-mail                      robert.townsend@mcga.gov.uk
<b>WG2 Vice-Chair</b>	<b>Norwegian Coastal Administration</b>  Mr Richard AASE Norway e-mail                      richard.aase@kystverket.no
<b>WG3 Chair</b>	<b>Italian Coast Guard</b>  Ms Barbara MAGRO Italy e-mail                      barbara.magro@mit.gov.it
<b>WG3 Vice-Chair</b>	<b>Agency for Maritime Services and Coast - Shipping Assistance Division</b>  Mr Stefaan PRIEM Belgium e-mail                      stefaan.priem@mow.vlaanderen.be
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The following apologies for absence were received by the IALA Secretariat before VTS47:

Name	Organization
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Allen BIRCH	MITAGS

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Vice-Chair – Els Bogaert - Agency for Maritime Services and Coast - Flemish Government

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## ANNEX D LIST OF INPUT PAPERS

All papers are posted on the Committee section of the IALA website

Meeting	Agenda Item	Input Paper Title	Source
VTS47-	1.3.1	Provisional Agenda VTS47 20190710	IALA Secretariat
VTS47-	2.1.1	VTS46 Action Items	IALA Secretariat
VTS47-	2.1.2	Report of VTS46 Final v2	IALA Secretariat
VTS47-	3.1.1	Liaison to ARM and VTS - Maritime Services in the context of e-Navigation (ENAV23-12.1.3)	ENAV23
VTS47-	3.1.1.1	A lay-persons description of e-Navigation (ENAV23-12.1.4)	ENAV23
VTS47-	3.1.2	Liaison Note to ARM and VTS on R-Mode (ENAV23-12.1.13)	ENAV23
VTS47-	3.1.2.1	R-Mode Stakeholder Requirements (ENAV23-12.1.15)	ENAV23
VTS47-	3.1.3	JCG Digital Communication Technology in VTS Expert Meeting	Japan Coast Guard
VTS47-	3.1.3.1	Report of Expert Meeting	Japan Coast Guard
VTS47-	3.1.3.2	Annex 1 List of participants	Japan Coast Guard
VTS47-	3.1.3.3	Annex 2 Presentation of Australia	Japan Coast Guard
VTS47-	3.1.3.4	Annex 3 presentation of Norway	Japan Coast Guard
VTS47-	3.1.3.5	Annex 4 presentation of Singapore	Japan Coast Guard
VTS47-	3.1.3.6	Annex 5 presentation of US	Japan Coast Guard
VTS47-	3.1.3.7	Annex 6 presentation of Japan	Japan Coast Guard
VTS47-	3.1.4	IALA Workshop on Harmonising VTS Voice Communication Draft Report	IALA Secretariat
VTS47-	3.1.5	IALA Workshop on Cyber Security	IALA Secretariat
VTS47-	3.1.6	Maritime Services - review of tasks 1.24 & 1.27	IHMA
VTS47-	3.1.7	Proposal for new task - revision of Guideline 1089 on VTS	IHMA
VTS47-	3.1.8	Proposal for the Amendment of VTS Awareness for Navigation Officers	China MSA
VTS47-	3.1.9	Proposal for the Amendment to the draft Guideline on VTS Voice Communications Phraseology relating to emergency scenarios	China MSA
VTS47-	3.1.10	Proposal on the Recommendation on Cyber-Security related to VTS	China MSA
VTS47-	3.1.11	NI Comments on Draft Guideline VTS awareness for Navigation Officers	The Nautical Institute
VTS47-	3.1.12	NI update on VTS training audit support for accreditation	The Nautical Institute

VTS47-	3.1.13	Detection of near-miss risk and dynamic hotspot in near future	MPA Singapore
VTS47-	3.1.14	Review of IALA VTS Model Courses	IALA Secretariat
VTS47-	3.1.15	Draft Guideline on VTS Phraseology - Cover Note	AMSA Australia & IHMA
VTS47-	3.1.15.1	Draft Guideline on VTS Phraseology	AMSA Australia & IHMA
VTS47-	3.1.16	VTS-INS product specification	Korean Register
VTS47-	3.1.16.1	VTS-INS product specification Annex 1 - VTS-INS product specification...	Korean Register
VTS47-	4.1.1	Report Council 69 Final	IALA Secretariat
VTS47-	4.2.2	IALA report on MSC101	IALA Secretariat
VTS47-	5.1.1	Report from IALA Correspondence Group (A.857 Revision) to VTS47	Chair A.857(20) ICG
VTS47-	5.1.2	Revised-New Resolution - Version 3	Chair A.857(20) ICG
VTS47-	5.1.3	ICG Response to Collated Comments on Draft Resolution (26 Aug)	Chair A.857(20) ICG
VTS47-	5.1.4	LAP Liaison Note to VTS47 re VTS Guidelines	IALA Secretariat
VTS47-	5.1.5	Report of the IALA Seminar on the Revision of IMO Resolution A.857(20) Guidelines for VTS	IALA Secretariat
VTS47-	7.1.1	Committee Work Programme for 2018-2022	IALA Secretariat
VTS47-	7.1.2	VTS Task Plan 2018-2022 20190311	VTS46
VTS47-	7.1.3	VTS Task Register 2018-2022 20190311	VTS46
VTS47-	8.2.1	WP Draft Guideline on Maritime Services (VTS46-13.3.1)	VTS46
VTS47-	8.2.1.1	WP Appendix 1 MS 1-3_merged revised WG 1 (VTS46-13.3.1.1)	VTS46
VTS47-	8.2.2	WP Guiding Principles for drafting the revised-new resolution A.857(20) (VTS46-5.1.4)	VTS46
VTS47-	8.2.2.1	WP Work programme for completing the revision of resolution A.857(20) (VTS46-5.1.5)	VTS46
VTS47-	8.2.2.2	WP Draft Revised Resolution - Guidelines for VTS (VTS46-13.2.5)	VTS46
VTS47-	8.3.1	WP draft Guideline on VTS Voice Communications Phraseology task 1.3.1 (VTS46-13.3.2)	VTS46
VTS47-	8.4.1	WP Terms of Reference - VTS Manual (VTS46-13.3.11)	VTS46
VTS47-	9.1.1	WP 1105 Ed.1 Shore-side portrayal ensuring harmonisation with e-Navigation related information December 2013 (VTS46-13.3.3)	VTS46
VTS47-	9.1.1.2	WP Gap analysis G1105 (VTS47-13.3.4)	VTS46
VTS47-	9.2.1	WP 1111 Ed.1 Preparation of Operational and Technical Performance Requirements for VTS Systems (VTS46-	VTS46

		13.3.5)	
VTS47-	9.2.2	WP Task 2.2.3 Draft Guideline on Acceptance of VTS Systems-draft (VTS46-13.3.6)	VTS46
VTS47-	9.2.3	WP Draft Guideline on Acceptance of VTS Systems Complex Sub Systems (VTS46-13.2.7)	VTS46
VTS47-	9.3.1	WP Report on task 231 during VTS46 (VTS46-13.3.8)	VTS46
VTS47-	9.3.1.1	WP Report on task 231 during VTS46 (VTS46-13.3.9) ANNEX A	VTS46
VTS47-	10.2.1	WP Draft Guideline on VTS awareness for Navigation Officers rev1 (VTS46-13.3.10)	VTS46

## ANNEX E LIST OF OUTPUT DOCUMENTS AND WORKING PAPERS

**Output documents** are submitted for review/action by a body other than the Committee initiating the document.

Meeting	Agenda Item	Output document title	Action
VTS47-	13.2.1	Draft Assembly Resolution on Guidelines for Vessel Traffic Services	To Council
VTS47-	13.2.2	Input Paper to Council on the update to IALA VTS Documentation Post Adoption of Revised IMO Resolution on Vessel Traffic Services	To Council
VTS47-	13.2.2.1	Annex to Liaison Note - IALA VTS Documentation required for approval	To Council
VTS47-	13.2.3	Liaison Note to LAP on VTS Manual	To LAP
VTS47-	13.2.3.1	Annex VTS Manual Chapter 4 - Regulatory and Legal Framework	To LAP
VTS47-	13.2.4	Liaison note to ARM and SC on IALA Cyber Security Workshop	To ARM & Steering Committee
VTS47-	13.2.5	Liaison note to ENAV Committee response to a lay-persons description of e-Navigation	To ENAV
VTS47-	13.2.6	Draft IALA Guideline on VTS Training for Deck Officers	To Council
VTS47-	13.2.7	Draft Recommendation on VTS Implementation R0119	To Council
VTS47-	13.2.7.1	Draft Guideline on Establishment of VTS GXXXX	To Council
VTS47-	13.2.8	Input Paper to Council on proposed changes to the VTS Committee work programme	To Council

**Working papers** will remain within the Committee for further review during **VTS48**.

Meeting	Agenda Item	Working paper title
VTS47-	13.3.1	WP Draft G1141 Operational Procedures for VTS
VTS47-	13.3.2	WP VTS product specification v060
VTS47-	13.3.2.1	WP ANNEX A - VTS-INS Product Specification final
VTS47-	13.3.2.2	WP ANNEX B – description VTS-INS v0.5.2
VTS47-	13.3.2.3	WP WG1-WG2 Joint Session Notes about VTS Product Specification version 0.6
VTS47-	13.3.3	WP Proposed Time Line for the Revision of Res. A.857(20)
VTS47-	13.3.4	WP 1111 Ed.2 Preparation of Operational and Technical Performance Requirements for VTS Systems
VTS47-	13.3.5	WP Task 2.2.3 Draft Guideline on Acceptance of VTS Systems-draft
VTS47-	13.3.6	WP 1105 Ed.1 Shore-side portrayal ensuring harmonisation with e-Navigation related information
VTS47-	13.3.7	WP Request for input - VTS Human Factors and Ergonomics
VTS47-	13.3.8	WP WG3 VTS Management Questionnaire

VTS47-	13.3.9	WP 1105 Ed.1 Shore-side portrayal ensuring harmonisation with e- Navigation
VTS47-	13.3.10	WP Draft Guideline on Maritime Services
VTS47-	13.3.10.1	WP Appendix 1 MS 1-3_merged revised WG 1
VTS47-	13.3.11	WP Draft guideline on VTS Voice Communications, Phrases/ Phraseology

*Action Items for the IALA Secretariat*

1. The **IALA Secretariat** is requested to forward the revised resolution A.857(20) (VTS47-13.2.1) to Council for approval. 15
2. The **IALA Secretariat** is requested to forward the revised resolution A.857(20) (VTS47-13.2.1) to potential co-sponsor of the submission to NCSR7. 15
3. The **IALA Secretariat** is requested to forward the update of IALA VTS documentation post adoption of the revised IMO resolution on vessel traffic services (VTS47-13.2.1 and VTS47-13.2.2) to Council for their consideration. 15
4. The **IALA Secretariat** is requested to forward the review of Guideline G1141 on Operational Procedures for VTS (VTS47-13.3.1) as a working paper to VTS48. 15
5. The **IALA Secretariat** is requested to forward the draft Recommendation on the Implementation of Vessel Traffic Services (R0119) (VTS47-13.2.7) to Council for approval. 15
6. The **IALA Secretariat** is requested to forward the draft Guideline on Establishment of Vessel Traffic Services (VTS47-13.2.7) to Council for approval. 15
7. The **IALA Secretariat** is requested to forward draft guideline on Maritime Services (VTS47-8.2.1) as a working paper to VTS48. 16
8. The **IALA Secretariat** is requested to forward the Council Input Paper proposed changes to VTS committee tasks (VTS47-13.2.8) to Council for their consideration. 16
9. The **IALA Secretariat** is requested to forward the draft guideline on VTS Voice Communications, Phrases/ Phraseology (VTS47-13.3.11) as a working paper to VTS48. 16
10. The **IALA Secretariat** is requested to forward the liaison note VTS47-13.2.3 and its annex VTS47-13.2.3.1 to LAP for their consideration on Chapter 4 Regulatory and legal framework of the VTS Manual. 16
11. The **IALA Secretariat** is requested to send invitations to the Coordination Group on the revision of the VTS Manual for a GoToMeeting on the 18 November 2019 at 10.00 CET. 16
12. The **IALA Secretariat** is requested to rename task 1.1.3 to 'Develop guidance on training needs for those involved in the planning and implementation of a VTS, to be included in a new Guideline on the Establishment of VTS'. 17
13. The **IALA Secretariat** is requested to forward the four working documents (Draft Product Specification VTS47-13.3.2, working notes on joint session between Working Group 1 and Working Group 2 (VTS47-13.3.2.3) together with the input documents from the Republic of Korea (VTS47-13.3.2.1 and VTS47-13.3.2.2) as working papers to VTS48. 19
14. The **IALA Secretariat** is requested to rename task 2.3.1 to "Develop a Product Specification under the S-100 Framework for VTS". 19
15. The **IALA Secretariat** is requested to investigate, with the Working Group Chair and Vice Chair, the options for the provision of a questionnaire on the management of a VTS addressed to VTS Committee members. 20
16. The **IALA Secretariat** is requested to investigate, with the Working Group Chair and Vice-Chair, the options for the provision of a questionnaire on the content of IALA Model Course V-103/1 addressed to interested stakeholders and provide input to VTS48, as appropriate. 21
17. The **IALA Secretariat** is requested to forward the draft IALA Guideline on VTS training for Deck Officers (VTS47-13.2.6) to Council for approval. 21
18. The **IALA Secretariat** is requested to forward the Input Paper (VTS47-13.2.8) on the changes to the VTS Committee tasks (deletion of task 3.3.3 on produce a VTS Training Manual) to Council for their consideration. 21
19. The **IALA World-Wide Academy** is requested to undertake research on the implementation of accreditation and approval processes for VTS training and to provide input to VTS48. 21
20. The **IALA Secretariat** is requested to forward the VTS Task List (2018 – 2022) (VTS47-7.1.2) and the Task Register (2018 – 2022) (VTS47-7.1.3) as working papers to VTS48. 22
21. The **IALA Secretariat** is requested to forward the report of VTS47 (VTS47-14.1) to the IALA Council, to note after 4 October 2019. 23

### *Action Items for Participants*

22. That **Committee participants** were welcome to provide photos and comments on the VTS Manual within the scope of the agreed terms of reference. The full content of the VTS Manual will be available on a dedicated file sharing space with the username: VTS Manual and password: Onto2020! Photos and comments should be sent to IALA Secretariat 12
23. **Committee Participants** are invited to forward any comments on Guideline G1141 on Operational Procedures for VTS (VTS47-13.3.1) as an input paper to VTS48. 15
24. That **Ernest Batty** is requested to specify in writing to the coordinator ([neil.trainor@amsa.gov.au](mailto:neil.trainor@amsa.gov.au)) the actions and requirements needed for the data bases of the VTS Questionnaire to be moved elsewhere. 17
25. That **Neil Trainor**, as coordinator for the VTS Questionnaire, is requested to forward the written report from Mr. Batty to IALA Secretariat for their further consideration on hosting the data bases of the IALA VTS Questionnaire on a local server. 17
26. That **Neil Trainor** is requested to arrange a teleconference meeting with the previous data administrator and Mr. Batty and report the outcome of the meeting to IALA Secretariat. 17
27. **Committee Participants** are requested to confirm their attendance to the intersessional meeting on 3-5 December 2019 concerning developing guidance for acceptance of VTS systems to Bente Nedergaard ([bnn@terma.com](mailto:bnn@terma.com)) by 19 November 2019. 19
28. **Richard Aase** is requested to forward the result of the intersessional work to VTS48. 19
29. That **Committee participants** are requested to forward the Liaison note (VTS47-13.3.7) Request for input – Guidance on Human Factors and Ergonomics, to human factor experts and provide feedback to VTS48. 20
30. **Committee Participants** are requested to provide comments on the draft documents on the guidelines on the standard for training and certification of VTS Personnel. 21
31. **Committee Participants** are requested to participate in the intersessional GoToMeeting on the update of IALA Recommendation R0103, planned to be held on the 16 December 2019 and confirm their attendance to [jillian@jcjconsulting.net](mailto:jillian@jcjconsulting.net) by 9 December 2019. 21
32. **J Carson-Jackson** to prepare a draft revision of the IALA NAVGUIDE, Chapter 5, as input for VTS48. 23



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Association Internationale de Signalisation Maritime