



## IALA POLICY ADVISORY PANEL

### REPORT OF THE 44<sup>TH</sup> SESSION OF THE IALA POLICY ADVISORY PANEL (PAP)

**08 - 10 February 2022**

# EXECUTIVE SUMMARY

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The 44<sup>th</sup> 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 can convene ad-hoc sessions to consider any issues but were also encouraged to arrange inter committee meetings to coordinate between them.
- 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 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.
- That the Heritage Lighthouse of the Year Award should remain non-competitive and celebratory in nature in order to promote awareness of lighthouse heritage.
- 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 17 on AtoN (ARM)
  - Develop a new MS 18 on PNT (ENG)
  - 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 18<sup>th</sup> April 2022.

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

The PAP was also updated on many items including:

- IMO activity
- IALA / IHO Technical coordination meeting
- The progress of the review of R1001 IALA Maritime Buoyage System
- The introduction of the new IMO resolution A.1158(32) Guidelines on Vessel Traffic Services



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# Report of the 44<sup>th</sup> Session of the IALA

## Policy Advisory Panel

### GENERAL

The 44<sup>th</sup> session of the Policy Advisory Panel (PAP) was held on 08 – 10 February 2022 virtually, with IALA Deputy Secretary-General Omar Frits Eriksson as Chair and Thomas Southall as Secretary.

## 1. INTRODUCTION

### 1.1. WELCOME BY SECRETARY-GENERAL AND DEPUTY SECRETARY-GENERAL

#### 1.1.1. WELCOME BY THE SECRETARY-GENERAL

The Secretary-General, Francis Zachariae, welcomed PAP members to the meeting and expressed his hopes that this will be the last virtual session. The world is opening up fast and the impact of the pandemic is lessening. IALA hosted a signing ceremony last week and the IGO status is nearing rapidly. Francis commented that MASS will have a great impact on the Association in the future, as is digitalization. The boundaries between the committees are now not as clear and we will adapt our way of working to accommodate this. The General Assembly in Rio next year maybe the last of the Association and the new Organization may have different idea on standards and therefore it maybe prescient to minimise change to these documents at the next Assembly.

#### 1.1.2. WELCOME FROM THE DEPUTY SECRETARY-GENERAL

The Deputy Secretary-General welcomed all members to the 44<sup>th</sup> session of the PAP.

### 1.2. APPROVAL OF AGENDA

The agenda (input paper PAP44-1.2.1) was approved. The approved agenda is provided in ANNEX A.

### 1.3. APOLOGIES AND INTRODUCTIONS

No apologies were received.

## 2. REVIEW OF ACTION ITEMS FROM LAST MEETING

### 2.1. REVIEW OF ACTION ITEMS FROM PAP42 AND 43

The PAP Secretary, Thomas Southall, highlighted to the PAP action item no.5:

*“That the Secretariat investigate alternative means of communicating between committees that can be formal, informal and swift.”*

In response to this action item the PAP Chair encouraged Chairs to communicate between themselves on matters and also highlighted that PAP members now have the option of requesting an ad-hoc PAP session on any particular matter that may need focused coordination.

## 3. REVIEW OF INPUT PAPERS

### 3.1. REVIEW OF INPUT PAPERS TO PAP44

Members noted the revised input paper list (PAP44-3.1.1). A list of input papers is provided in ANNEX C.

## 4. REPORTS FROM OTHER BODIES

### 4.1. IALA

#### 4.1.1. IALA COUNCIL

The 74<sup>th</sup> 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 PAP.

The discussion 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

### 4.2. IMO

Minsu briefed the meeting programme of IMO for this year and pointed out the topics of interest.

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	

Maritime Services – IALA will make a submission to IMO (NCSR9) to explain what IALA is preparing, then send in a more technical input to the following meeting. Discussion concluded that the Secretariat draft a non-bulky input for NCSR regarding an update on IALAs approach to maritime services and coordinate with the committees before submitting to IMO. Deadline for submission is 18 April.

#### Action item:

*That the Secretariat will draft a non-bulky input for NCSR regarding an update on IALAs approach to maritime services and coordinate with the committees before submitting to IMO.*

## 4.3. IHO

### 4.3.1. TECHNICAL COORDINATION MEETING

The sixth IALA/IHO technical cooperation meeting was held on 26 Nov 2021. The meeting discussed how to harmonise 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
AtoN	S-201	AtoN information	ARM	1.0.0
	S-240	DGNSS almanac	ENG	1.0.0
Positioning	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
	S-210	Inter VTS exchange	VTS	Started
VTS	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 training event and summarized the roles and responsibilities of DCB.

The secretariat will coordinate these proposals with an inter committee group for the GI registry.

#### Action item:

*That the Secretariat organize and host an inter committee group meeting on the GI registry proposals.*

## 4.4. ITU

The ENAV Chair Hideki Noguchi, introduced the three inputs regarding ITU matters including a report from Stefan Bober. He highlighted the work surrounding VDES and AIS. In particular he anticipated input from IMO NCSR which may trigger the revision of the ITU AIS standard.

Hideki highlighted the good relationship between ITU and IALA and the PAP would like to thank Stefan Bober for his hard work in this area. The PAP noted the input but agreed that there was no action required.

## 4.5. OTHER (PIANC, CIRM, IMPA, & IHMA ETC.)

### 4.5.1. DIGITAL@SEA

The schedules of the D@S conferences have been disturbed by the COVID situation, but now things are getting back and the most upcoming one is the D@S North America on 11-12 May 2022, then Asia Pacific in 3<sup>rd</sup> quarter of 2022 and the D@S International in 2023.

### 4.5.2. 3GPP

3GPP working on “5G advanced”. This is quite an advancement with positioning evaluation, sidelink relay enhancement and the satellite access phase 2. The liaison officer of 3GPP will join and present to the next ENAV meeting.

### 4.5.3. PIANC

PIANC hosted a webinar to present the recent working group reports of their Maritime Commission in 2022. It covered interesting topics such as automation of container terminals, fender design, and the Ever Given Suez Canal incident.

## 5. COORDINATION

### 5.1. PROGRESS REPORTS

#### 5.1.1. ENAV

The 28th meeting of the ENAV Committee was held virtually from 11 to 29 October 2021; chaired by Hideki Noguchi and Vice-chair by Jorge Arroyo. The Secretary for the meeting was Jaime Alvarez.

There were 122 registered participants, 6 for the first time, from 32 countries and 4 organisations and 1 observer.

Key highlights:

- New task proposal was identified for the next work programme 2023-2027
- The Committee reviewed the Maritime Buoyage System following ARM Committee request and proposed some amendments to the document through a liaison note
- A new revision of the Guideline 1128 on Specification of eNavigation technical service was finalised
- A new emerging technology for passive and active GNSS antenna systems decreasing the spoofing and jamming vulnerabilities of the GNSS signal was identified and presented during the session
- Related to the deployment of AtoN and eNavigation services in the context of MASS, the liaison note to PAP on proposal of amendment of maritime service for MASS was produced and a number of technical sessions conducted
- The liaison note to ARM regarding Ship Reporting Guideline was drafted
- The starting document of Draft Technical service specification for the provisioning of AtoN information to end-users using the S-125 data model launched the activity during the session
- The draft IALA Maritime Communications Manual was initiated

#### 5.1.2. VTS

The 51st session of the VTS Committee was held from 16 September - 7 October 2021 virtually with Monica Sundklev as Chair and Dirk Eckhoff as Vice-chair. The Secretary for the meeting was Thomas Southall.

151 participants from 33 countries, four Sister organisations participated in VTS51. 14 participants attended for the first time.

The meeting was carried out in accordance with the updated Virtual Committee Arrangements online. Approximately 60 meetings were arranged.

Key outputs completed included:

- Council Liaison Note including the package of 23 amended documents aligning with the new IMO resolution
- Draft Guideline G1166 VTS in Inland Waters
- Draft Guideline G1167 VTS Management
- Revised Guideline G1110 Use of Decision Support Tools for VTS Personnel
- Revised Guideline G1014 Accreditation of VTS Training Organizations and Approval to Deliver IALA VTS Model Courses
- VTS Manual updates

The following liaison notes were prepared:

- Liaison note to ARM on the proposed revision to the IALA NAVGUIDE (VTS Section)



- Liaison Note to ARM on the MBS Review
- Liaison Note to ARM on review and update of G1088
- Liaison Note to PAP on IALA standards
- Liaison Note to PAP on Maritime Services
- Liaison Note regarding possible case studies - Operations and Trials of Autonomous Ships
- Liaison Note regarding the discussion paper - Implications of MASS from a VTS perspective

Monica Sundklev highlighted that the VTS Questionnaire was still an active task and hoped that the Secretariat could assist the Committee with this item. All other tasks were proceeding well with many intersessional groups meetings.

The PAP Chair congratulated the VTS Committee on the adoption of IMO resolution A.1158(32) and highlighted that there will be a webinar series on the topic in February and March.

### 5.1.3. ENG

The 14th meeting of the ENG Committee (ENG14) was held virtually from 4 October to 2 November 2021. The session was attended by 114 registered participants from 30 countries. 13 participants attended for the first time.

Working in four working groups, the Committee considered 66 input and produced 8 output documents.

As with other committees, the virtual meeting system worked well, and the work plan was progressed.

Key work areas of specific interest to PAP:

- Enhanced Radar Positioning Service workshop held in November 2021; this was a success with interest from all stakeholders.
- AtoN Engineering Workshop in Sydney postponed until further notice
- Proposed to start the formal procedures to arrange a virtual Heritage Seminar in August 2022 hosted by Directorate of Hydrography and Navigation, Brazil.
- 2023 – 2027 work plan drafted.

The ENG Chair sought the view of PAP for the future direction of the Heritage Lighthouse of the Year as to whether it wishes to see IALA HLY develop into an annual competition with a systematically selected winner or for it to continue as an informally commended accolade. Following discussion, the PAP concluded that it should remain non-competitive and celebratory in nature in order to promote awareness of lighthouse heritage. The PAP noted that the IALA HLY had been a huge success and there is no obvious compelling requirement to change the format.

### 5.1.4. ARM

The 14<sup>th</sup> Session of the ARM Committee was held virtually from 15 to 29 October 2021 with Phil Day as Chair and Dave Lewald as Vice-Chair. The Secretary for the meeting was Thomas Southall.

94 Participants from 27 countries participated in ARM14. 7 participants attended for the first time.

The meeting was carried out in accordance with the Virtual Committee Arrangements online. Approximately 46 meetings were arranged.

Key outputs completed included:

- Amended Recommendation R0126 The Use of the Automatic Identification System (AIS) in Marine Aids to Navigation Services (A-126)
- Reviewed Guideline G1054 Preparing for An IMO Audit on Aids to Navigation Service Delivery
- Revised G1078 - The Use of AtoN in the Design of Fairways Channels

- New Guideline on the Management of Maritime Resource Name Organization Identifiers
- Revised Recommendation 0-139 the Marking of Man-made Structures
- Guideline on Man-made Structures
- New Guideline on the Marking of Breakwaters and Barriers

The following liaison notes were prepared:

- New Definitions for IALA Dictionary related to Task 1.5.3
- ARM comments on the revision of IALA standards within the report
- Liaison Note to ENAV and VTS -Technologies to Support Maritime Single Window
- Liaison note to all committees on Guideline 1052 Quality Management Systems for AtoN Service Delivery
- Liaison note to ENG on 3rd party Quality Control
- Liaison note to all committees on Recommendation R1001 The IALA Maritime Buoyage System (MBS) Edition 2
- Liaison Note to Council on AIS ASM survey
- Liaison note to PAP and MASS Task Force
- Liaison note to PAP on STCW amendments

Phil Day, Chair of ARM, highlighted that the IALA MBS is being formatted by the Secretariat with a view to finalizing it for Council 75.

#### **5.1.5. IMC**

Malcolm Nicholson, IMC, reported that arrangements were on track for the General Assembly and Conference in Brazil. Clarification was given regarding the current approval criteria for Industrial members, the criteria for the IGO was not finalized yet.

#### **5.1.6. LAP**

The LAP Chair highlighted that LAP met in October 2021 and received updates on many current IALA work items such as, MASS, standards, risk register and issues surrounding the polar regions.

#### **5.1.7. WWA**

The Dean of the Academy, Omar Fritz-Eriksson, provided PAP with an update on the work of the Academy. In particular, including the translation services that they coordinated, the approach of the Academy that supports Goal 2 of IALA, namely, to enlighten, educate and engage recipients of the Academies help. He referenced findings of IMO IMSAS auditors as a good example of the academy's experiences reflected in many places all over the world. The Academy also continues to assist coastal states with many areas including risk assessment, AtoN planning, governance and policy and procurement training.

Omar highlighted the webinar series as an effective tool to reach out to members. The alumnus of the academy currently stands at 326 AtoN managers. There are now three new textbooks that aids the Level 1.1 AtoN managers course that Colin Day has produced. All online courses have also been reviewed. To conclude the Dean reported that the Academy has a busy schedule this year visiting many different parts of the globe.

## 6. STRATEGY AND POLICY

### 6.1. STRATEGIC GOALS AND POLICIES

#### 6.1.1. DRIVERS AND TRENDS

The PAP Chair reported to the PAP that there was a meeting of the Council Strategy Drafting Group that discussed the Drivers and Trends Document at Council 74. The document was amended, but the PAP noted that there were comments from Councillors regarding the inclusion of visual AtoN and that the Group will reconvene at Council 75 to discuss that point. A suggestion from the IMC PAP representative regarding an entry on visual AtoN in the *Drivers and Trends* document was considered and PAP concluded that it would be more appropriate that the IMC submit this suggestion directly to the Strategy Drafting Group for their consideration with the Secretariat available to assist in drafting the input to the Group.

Discussion also concluded that the document should be used as inspiration for the committees when considering current work but especially when considering future work items.

#### *Action item:*

*That the Secretariat assist the IMC in drafting an input to the Council Strategy Drafting Group regarding an entry on visual AtoN for consideration for the Drivers and Trends document.*

#### 6.1.2. CROSS-COMMITTEE COORDINATION

Minsu Jeon updated the PAP on cross-committee coordination, providing an overview of all communications and liaisons on task items from the Work Programme. The Chair reminded members that the PAP can convene ad-hoc sessions to consider any issues but were also encouraged to arrange inter committee meetings to coordinate between them.

#### 6.1.3. IALA POSITION ON THE DEVELOPMENT OF AtoN SERVICES

The Chair recalled the *IALA Position on the Development of AtoN Services* document. Whilst there were no specific considerations regarding the document at PAP44, the Chair requested that the PAP focus on this document in future sessions.

#### 6.1.4. REVISION OF IALA STANDARDS

The PAP noted the following inputs:

PAP44-	4.1.1.1	The use of the word “shall”	ENAV Chair
PAP44-	6.1.4.1	Liaison Note to PAP on IALA Standards (VTS51-13.1.0.3)	VTS51
PAP44-	6.1.4.1.1	Annex to draft Liaison Note to PAP on IALA Standards_S1040 VTS (VTS51-13.1.0.3.1)	VTS51
PAP44-	6.1.4.2	Secretariat note on revision of IALA Standards	IALA Secretariat
PAP44-	6.1.4.3	Draft revision S1010 AtoN Planning and Service Requirements (for review 1st half 2022)	IALA Secretariat
PAP44-	6.1.4.4	Draft revision S1020 AtoN Design and Delivery (for review 1st half 2022)	IALA Secretariat
PAP44-	6.1.4.5	Draft revision S1030 Radionavigation Services (for review 1st half 2022)	IALA Secretariat
PAP44-	6.1.4.6	Draft revision S1040 VTS (for review 1st half 2022)	IALA Secretariat
PAP44-	6.1.4.7	Draft revision S1050 Training and Certification (for review 1st half 2022)	IALA Secretariat

PAP44-	6.1.4.8	Draft revision S1060 Digital Communication Technologies (for review 1st half 2022)	IALA Secretariat
PAP44-	6.1.4.9	Draft revision S1070 Information Services (for review 1st half 2022)	IALA Secretariat
PAP44-	6.1.4.10	Structure of the standards	IALA Secretariat
PAP44-	6.1.4.11	Draft revision S1030 Radionavigation Services (for review 2nd half 2021) (ENG14-12.3.3)	ENG14

Minsu Jeon highlighted the changes so far and the timeline for finalizing the drafts. The Secretariat have taken the comments on the standards from each committee and will submit the consolidated versions to LAP. The PAP noted that, ultimately, the standards will be submitted to Council 76 in December 2022 before General Assembly.

Monica Sundklev, VTS Chair, introduced paper 6.1.4.1 *Liaison Note to PAP on IALA Standards (VTS51-13.1.0.3)* which was then considered by the PAP.

All PAP members concluded that:

- The scopes will be numbered e.g., 1.1 in each standard.
- 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 are informative.
- Use of the words 'shall or should' in IALA documentation should be considered clarified for instance in the Style Guide.
- The standards can only be approved by the General Assembly and not Council, as proposed in input paper 6.1.4.1. which is reflected in the Constitution of IALA.
- That input document 6.1.4.9 *Structure of the standards*, should be amended to reflect:
  - Heritage and 'culture' under standard S1020 in place of 'Heritage and Legacy'.
  - Deletion of '5.6 Model Courses' under standard S1050
  - Removal of the term 'harmonized' from any of the scopes
  - Review of the need of anything listed under the scopes in parenthesis

#### **Action item:**

*That the Secretariat amends the VTS Manual to reflect that only recommendations are normative or informative. Guidelines can never be normative or informative as they are a broad description of possible ways you may fulfil the provisions of a recommendation.*

*That the Secretariat is prepared to explain to the VTS committee that 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.*

*That the Secretariat forwards updated versions of the standards to LAP.*

*That the Secretariat and the LAP Chair develop guidance on the use of the words shall or should in IALA documentation and provide input to subsequent PAPs.*

#### 6.1.5. IALA'S INVOLVEMENT IN MASS

Simon Millyard, Chair of ENG, presented input paper PAP44-6.1.5.1 from the MASS Task Force (MTF). The document considered the draft recommendation and guideline from ENAV on MASS. Discussion concluded that the two documents 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 input paper suggested the allocation of topics, which PAP 44 discussed. It was noted that some of the sections were also relevant in several committees. It was clarified that the proposed sections were not final, but a start. Further discussions will be made within and between the committees. The meeting also agreed that LAP could be included to review liability issues. The input paper table was amended by PAP to read

Committee	Section to develop in the Guideline
ENAV	<b>Overall document owner</b> Communication media Data transfer standards Cyber Security
VTS	VTS interaction with MASS Safe and efficient operations Communications - operational requirements Interaction with unmanned vessels VTS - Portrayal
ARM	Management Portrayal Spatial Awareness Interaction with manned vessels Risk Management & Assessment
ENG	PNT Position augmentation Power availability Conventional AtoN visibility to MASS
LAP	Liability

It was agreed that ENAV would amend the draft recommendation and guideline on MASS with the proposed additions from the discussions, see table above. They would then circulate the draft to the other committees for them to work on their respective topics.

The PAP also considered input papers 6.1.5.2 and 6.1.5.2.1 regarding a maritime service for MASS but concluded that this would be outside of IALAs scope.

The PAP noted ARMs approach to MASS laid out in input paper 6.1.5.3 and agreed the contents of the paper.

**Action item:**

*That the ENAV Committee to amend the draft recommendation and guideline on MASS to align the contents with the table contained in section 6.1.5 of the PAP44 report. Once amended the ENAV Committee would then circulate the draft to the other committees for them to work on their respective topics.*

#### 6.1.6. SUSTAINABILITY

Simon Millyard, Chair of ENG, introduced PAP44-6.1.6.1 which brought forward proposals that would support sustainability initiatives. The four proposals were:

- Manufacture AtoN that have a long life and will withstand new technology being installed in them rather than throw them away after 5 or 10 years. Make AtoN that are maintainable for this and not so disposable. IALA could produce a Guideline on this topic to support manufacturers and designers produce AtoN which are repairable and fit for a long life. This should then be a factor in the selection of the equipment.
- Promote the use of Virtual AtoN in place of physical ones, particularly remote AtoN that require a ship or helicopter to attend. The ship or helicopter are expensive to operate and carry a high environmental impact. Why are we still placing buoys in the water when AIS is readily available and low-cost receivers and display is available to even a small leisure vessel?
- Provide guidance on the overall life cycle environmental impact of particular AtoN or service. For example, take a simple 2.5m diameter buoy with a 5-mile self contained lantern; the environmental impact to over its life to:
  - Manufacture
  - Install
  - Maintain
  - Inspect
  - Battery change
  - Repair
  - Remove
  - Dispose

These may be considered at the procurement stage in a mature and forward-thinking company in terms of cost but the assessment in terms of overall life cycle environmental impact is rarely considered. This is because it is difficult to understand the overall through-life environmental impact of an item. Take for example uPVC (plastic) window frames. They last for say 40+ years and once installed do not need painting or regular maintenance BUT they take energy to make and are often sent to landfill at the end of their life: therefore, it is difficult to know what to do for the best environmental outcome. Could IALA provide guidance on how to assess the environmental impact of equipment to guide manufacturers, designers, and the selection for procurement. This is not a straightforward task and is a complex multifaceted topic (through life emissions, energy, landfill, toxins, etc.).

- Review how IALA meetings are held. While it is clear having people in the same room aids discussion and helps nurture relationships, we've seen how it is possible to work remotely through the new IALA tools. A reduction in the travels of IALA members twice a year would reduce the amount of CO2 emissions related to hosting IALA meetings and events. It is proposed that a balanced approach is considered as the relationships and in-person discussions are also important. Do both meetings a year need to be in person? Could workshops/seminars be held virtually?

The PAP welcomed the paper and its general direction. It was noted for instance that deployment of virtual AtoN must be determined by navigational risk assessment and does require shore side infrastructure. The PAP recalled that there was already information within IALA regarding sustainability but there may be gaps in terms of quantifying the environmental impact of different types of AtoN and areas such as 'green IT'

which may be explored further. It was also suggested that environmental impact and sustainability considerations should be factored into IALAs guidance on risk. The PAP encouraged an abstract on this subject should be submitted to be delivered at the IALA Conference and a future workshop or seminar should be planned in the future.

**Action item:**

*ENG15 to consider the scope and timing for a workshop on Sustainability in the provision of AtoN.*

## **6.2. CHALLENGES AND OPPORTUNITIES**

### **6.2.1. GLOBAL MARITIME DIGITAL ROUTE TRANSITION (GMDRT) POTENTIAL PROJECT**

Minsu Jeon, Technical Operations Manager reported that the project is being led by MoF in Korea and Bergmann Marine. Many high-profile stakeholders joined a workshop in November 2021. At the event there was general agreement that this was an important and timely development but that this should not be another test bed and so the name Global Maritime Digital Route Transition instead of testbed. Other conclusions from the workshop were:

- Need for maritime services to be user driven.
- Identify and verify best practices in e-Navigation.
- Vision and scope should be identified step by step.

### **6.2.2. IMO STCW AMENDMENTS**

Phil Day, ARM Chair, introduced paper 6.2.2.1 which highlighted the likely revision of the *STCW Code* at IMO. The ARM Committee agreed that IALA should be involved in the amendment of STCW but felt there would be limited impact from amending the Codes subject tables in any detail. However, IALA being referenced in these tables or in Part B as the provider of guidance to follow for seafarer training or model courses on AtoN and VTS would be an effective way of providing harmonization at an appropriate level of detail.

This guidance could be updateable outside of the IMO timetables and therefore could remain pertinent without further changes to STCW.

Failing this approach, the paper proposed that IALA should seek to additionally influence the content of existing IMO model courses and continue to provide guidance for seafarer training currently under production.

Following discussion, the PAP concluded that IALA should engage with the update of the STCW Code, although it would become clearer how best to approach this in the future, and that Council should be informed of the decision to provide input to IMO on the matter.

## **6.3. S1010 ATON PLANNING AND REQUIREMENTS**

### **6.3.1. R1001 IALA MARITIME BUOYAGE SYSTEM**

Phil Day, ARM Chair, thanked all committees for their input on the MBS. The document was now in its editorial phase and is also input to the LAP. The expectation is that R1001 will be submitted to Council for approval following ARM15. The PAP Chair extended his appreciation of all the work that ARM have put into the revision.

## **6.4. S1020 ATON DESIGN AND DELIVERY**

### **6.4.1. TSUNAMI MONITORING**

Minsu Jeon reported that the UN regional body called ESNB had its 4<sup>th</sup> session in October 2021 on this matter. The body is working on the technical side of monitoring waves specifically utilising underwater cables with pressure sensors. The PAP noted that the ENG is progressing their work on tsunami monitoring and will be included in their work on complimentary use of AtoN.



## 6.5. S1030 RADIONAVIGATION SERVICES

No matters arising.

## 6.6. S1040 VESSEL TRAFFIC SERVICES

### 6.6.1. INTRODUCTION OF NEW IMO RESOLUTION

Monica Sundklev, VTS Chair, reported that following at least 15 years of work within the VTS Committee the new IMO resolution on VTS, A.1158(32) was adopted by Assembly 32. The VTS Committee have updated IALA documentation related to VTS in order to comply with the new resolution. The PAP noted the main changes that the new documentation has brought about. The PAP Chair congratulated all involved on this important work.

## 6.7. S1050 TRAINING AND CERTIFICATION

### 6.7.1. DISTANCE LEARNING

The Academies' experience in this area has grown and there is a desire to continue to utilise distance learning in combination with traditional methods of delivery. The PAP noted that a mix of self study, interactive online sessions culminating in physical lessons was best practice for the delivery of the course. There was an intention to translate the courses to French and Spanish, but they must be harmonized together with the English delivery.

## 6.8. S1060 DIGITAL COMMUNICATION TECHNOLOGIES

No matters arising.

## 6.9. S1070 INFORMATION SERVICES

### 6.9.1. IALA S-200 DEVELOPMENT

Minsu Jeon, summarized the current work that was ongoing in the various committees. He explained that the product specifications had to be inputted to the IHO GI Register. The PAP Chair highlighted that the Secretariat and the VTS Chair had been approached by the MCP to assist and cooperate with the development of VTS related product specifications. The PAP welcomed this initiative, and this will be developed by an inter-committee task group between ENAV and VTS.

#### **Action item:**

*That the Secretariat provide an input paper to the committees regarding S-200 and the subsequent actions that the committees have to fulfil, particularly regarding the IHO GI register.*

### 6.9.2. MARITIME RESOURCE NAME (MRN)

The PAP noted that the Secretariat is working on populating the MRN registry with a small group. The Secretariat is currently assigning MRN numbers to all publications and documents but is seeking ways to make this technically easier.

### 6.9.3. MARITIME SERVICES

Minsu Jeon summarized IALAs current work on maritime services (MS). There will be an inter-committee task group working on this matter that will consider:

- Merging MS 1, 2 and 3 (VTS)
- Develop a new MS 17 on AtoN (ARM)
- Develop a new MS 18 on PNT (ENG)
- 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 task group will be circulated to all committees and an update will be submitted to NCSR 9 to inform IMO of the work of IALA in this area. The PAP noted that IHMA were preparing a submission to IMO FAL on the MS description on MS 4 (Port Support Services).

The PAP also considered input paper 6.9.3.1 a liaison note from VTS regarding the strategic direction on maritime services. Discussion concluded that:

- ARM is the lead committee on maritime services.
- Cross committee work is key to progressing this work, particularly for the submission to IMO and the maritime service descriptions.
- There is a need to communicate to all committees the requirement for a greater focus on preparing guidance on the implementation of the technical services (i.e., the requirements and interface descriptions) and data models (i.e., format of information) necessary to ensure effective and harmonised maritime services.

**Action item:**

*That the Secretariat convene a meeting on maritime services that consider the issues laid out in the PAP44 report (section 6.9.3), provide input to the committees and then draft submissions for the IMO as necessary.*

#### **6.9.4. MARITIME ICT PROPOSAL**

See section 6.2.1.

#### **6.9.5. GUIDELINE G1159 SHIP REPORTING FROM A SHORE-BASED PERSPECTIVE**

The PAP considered input paper 6.9.5.1 from ENAV to PAP and ARM regarding the maritime single window and the work conducted on *Guideline G1159 Ship Reporting from a Shore-Based Perspective*. The paper asked how the Guideline fitted into the work of the IMO FAL Committees work on the Maritime Single Window. It was pointed out that MSW-reporting contains much more information than IALA is involved in, for example, security, waste, hazmat, cargo, crew, passengers, Port State Control (PSC) and also custom related information which may be difficult for IALA to follow as well as to give guidance on as this is being developed in IMO. The PAP noted the paper and welcomed the coordination between ENAV and ARM. The panel also commented that the Task Group that developed G1159 could comment on the actions requested, taking IALAs responsibility into consideration. In addition, it was high-lighted that Dave Lewald, the ARM Vice-Chair, used to attend the IMO FAL Committee meetings as well as the EGDH<sup>1</sup> meetings on behalf of IALA, to gather latest information on the developments and harmonization as regards the electronic data exchange to and from a MSW. The Secretariat will obtain a copy of the ISO/CD 28005-1 document that deals with the Maritime Single Window. However, due to ISO policy, it may not be possible to share the document widely.

**Action item:**

*That the Secretariat will endeavor to obtain the ISO/CD 28005-1 document that deals with the Maritime Single Window.*

### **6.10. COMMITTEE WORK PROGRAMME AND STRUCTURE**

#### **6.10.1. COMMITTEE WORK PROGRAMME 2018 - 2023 AND 2023 – 2027**

The Secretariat is monitoring the progress of submissions for the future Work Programme. There are work programme and task plan templates for the 2023 - 2027 quadrennium. The PAP agreed to continue sending proposals for the next committee Work Programme to the Secretariat in order that a draft work programme can be input to the PAP. It was clarified that it is envisaged that the General Assembly of the current IALA will

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<sup>1</sup> Expert Group on Data Harmonization (EGDH)

take place as scheduled, and then the new Organization will determine whether to adopt the work programme 2023 – 2027.

**Action item:**

*That committee chairs provide their committee's proposals, both in the task register template and the task plan template, for the Work Programme 2023 – 2027 to the Secretariat in order that a draft work programme can be input to the PAP.*

### **6.10.2. FUTURE COMMITTEE STRUCTURE**

The internal structure of the committees is at the chairs' discretion; therefore, members were asked if they have any changes to consider and were encouraged to raise them at subsequent PAP sessions.

**Action item:**

*That committee chairs submit input to PAP on any possible changes to the future committee internal structure.*

### **6.10.3. UPCOMING EVENTS**

NOGUCHI Hideki introduced input paper 6.10.3.0 and 6.10.3.0.1, a proposal for a workshop on digital maritime radiocommunication infrastructure. He explained that at the 103rd session of IMO Maritime Safety Committee they agreed to include both VDES and NAVDAT into the post-biennial agenda.

Digital maritime radiocommunication is commercially available using satellite or specific services such as mobile telephone. However, these are not common in the maritime sector. VDES and NAVDAT will be the first to comprise of the digital maritime radiocommunication infrastructure. In addition, it is expected that other new technologies such as international mobile telecommunications (IMT) will be included in this infrastructure in the future.

Currently many AtoN and VTS providers in the world are considering how to digitize their system or equipment or to digitalize their services to connect ship and shore taking account of the emergence of new technologies such as maritime autonomous surface ships (MASS). Simultaneously, many IALA industry members are also developing or planning to develop new products to meet future demands from the authorities and providers. However, such consideration or development will require considerable investment and thus the authorities, providers and manufacturers require further.

IALA has already issued the Maritime Radio Communication Plan (MRCP) that introduced many radio communication technologies in the maritime sector from a mainly technical viewpoint and ENAV is currently updating the plan to become a manual. Based on MRCP and its successive manual, Japan Coast Guard believe that IALA is the best organization to develop its plan for digital maritime radiocommunication including operational and human factor elements as the future infrastructure for marine AtoN services.

The purpose of the workshop will be to:

- 1 To guide AtoN and VTS providers and manufacturers for the investment and development of digital maritime radiocommunication infrastructure in future.
- 2 To identify operational requirements of AtoN services and VTS for future digital maritime radiocommunication infrastructure.
- 3 To identify candidate technologies and challenges for future digital maritime radiocommunication infrastructure.
- 4 To identify educational and training requirements for future digital maritime radiocommunication infrastructure.
- 5 To identify the IALA role in digital maritime radiocommunication infrastructure.

The workshop will have the goal of developing an IALA plan on digital maritime radiocommunication infrastructure.

The PAP welcomed the proposal and invited the ENAV Committee to develop the proposal and submit it to Council for approval.

#### **Action item:**

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

#### **6.10.3.1. Workshop on AtoN engineering**

Due to the global pandemic this event is currently postponed until further notice.

#### **6.10.3.2. Workshop on S-100/200**

The joint IALA/IHO workshop on S-100/200 is due to take place later in 2022 and will be held face-to-face.

### **6.11. OPERATIONS/ADMINISTRATION**

#### **6.11.1. IALA DICTIONARY**

The PAP noted that the dictionary management group will meet in February to consider the inputs received from the various committees.

#### **6.11.2. COMMUNICATIONS**

Communications Officer, Audrey Guinault, updated the PAP on the improvements that IALA have been making regarding its communications. In particular, the website has been audited and recommendations made to improve user experience and usability. These will be examined and implemented as necessary.

Regarding the e-bulletin there is much more member content than before that enjoys an audience of 3500 users per campaign. IALAs social media presence is continually increasing especially on LinkedIn, which attracts around 30 new users each month.

The next webinar series focuses on the new IMO VTS resolution and will be delivered in English, Spanish and French.

#### **6.11.3. COMMITTEE FACILITATION**

Thomas Southall reported that as the first half 2022 committee season will be held virtually the chairs have an option to trial the new working arrangements agreed by PAP or follow the previous virtual committee working arrangements. Each Secretary will engage the chairs to discuss how they wish their committee to be conducted.

#### **6.11.4. IALA STYLE GUIDE**

Thomas Southall thanked members and their committee participants for their feedback on the *IALA Style Guide*. He then presented a table based on this feedback and invited PAP members to respond to the proposals outside of PAP. Once the changes are agreed version 1.4 will be published in due course.

### **6.12. OTHER**

#### **6.12.1. IALA ATO N AND VTS QUESTIONNAIRE**

The PAP noted that the Secretariat is looking at ways to improve the delivery of IALA's questionnaires, specifically in the areas of quality of data and human resources. Members will be updated on this matter in due course.

#### **6.12.2. IALA NAVGUIDE**

The NAVGUIDE is in its final editorial phase with support from James Collocott. The draft will be circulated and submitted to the next PAP meeting.

### **6.13. THE IGO PROJECT**

The new Convention has now been signed by 51 States and ratified by 5. Once there are thirty ratifications or equivalents, IALA will transition from an NGO to an IGO after a 90 days period. Once the Convention has

entered into force the General Assembly must be convened within 6 months. The President, Vice-President, Council, Committee Chars / Vice-Chairs, Secretary-General and Secretariat will operate during the transition until the first General Assembly. Once the transfer of rights, interest, assets and liabilities is completed the old IALA will terminate.

## **7. ANY OTHER BUSINESS**

No matters arising.

## **8. REPORT OF THE MEETING**

The final report was approved by correspondence.

## **9. DATE AND VENUE OF NEXT MEETING**

Subsequently to the session the following dates for the next few PAPs were proposed:

- PAP45 – 6 April 11:00 – 12:00 UTC – purpose to finalize the document being submitted to IMO regarding MS before it is submitted for Council out of session approval.

Sessions proposed after PAP45 are envisaged to be in-person.

- PAP46 – 2 – 4 May – post-committee season PAP
- Conference Paper Selection Committee – 5 – 6 May
- PAP47 – 13 – 15 September – pre-committee season PAP

## **10. CLOSING OF MEETING**

Omar Frits Eriksson thanked all participants for their cooperation and their great work in the committees.

## **11. LIST OF ANNEXES TO THE REPORT**

- 1 Agenda  
A copy of the agenda is at ANNEX A.
- 2 Participants  
A list of participants is at ANNEX B.
- 3 Input papers  
A list of input papers is at ANNEX C.
- 4 Output papers  
A list of output papers is at ANNEX D.
- 5 Action items  
A list of action items is at ANNEX E.

## ANNEX A AGENDA



### 44<sup>th</sup> Meeting of the IALA Policy Advisory Panel (PAP44)

The 44<sup>th</sup> meeting of the Policy Advisory Panel will be held on 8 – 10 February 2022, as a hybrid meeting. The timings of the meeting are:

Wednesday	08/02/2022	11:00 – 13:00 UTC
Thursday	09/02/2022	11:00 – 13:00 UTC
Friday	10/02/2022	11:00 – 13:00 UTC

The objectives of the panel are to:

- Formulate advice for the IALA Council and Secretariat.
- Coordinate the work of the IALA committees to achieve the goals of the Strategic Vision; and
- Monitor and develop work programmes for the committees.

### Provisional Agenda

Day One

#### 1 Introduction

1.1	Welcome by Secretary-General and Deputy Secretary-General	FZ, OFE	
1.2	Approval of agenda	OFE	Approve
1.3	Apologies and introductions	OFE	Note

#### 2 Review of action items from last meeting

2.1	Review of action items from PAP43	TS	Note
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#### 3 Review of input papers

3.1	Review of input papers to PAP44	TS	Note
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#### 4 Reports from other bodies

4.1	IALA		
4.1.1	IALA Council	MJ	Note
4.2	IMO	MJ	Note
4.3	IHO		
4.3.1	Technical coordination meeting	MJ	Note
4.4	ITU	MJ	Discuss
4.5	Other (PIANC, CIRM, IMPA, & IHMA etc.)	MJ	Note
4.5.1	Digital@Sea	MJ	Note
4.5.2	3GPP	MJ	Note

#### 5 Coordination

5.1	Progress reports		
5.1.1	ENAV	HN	Note
5.1.2	VTS	MS	Note
5.1.3	ENG	SM	Note
5.1.4	ARM	PD	Note



5.1.5	IMC	MN	Note
5.1.6	LAP	CS	Note
5.1.7	WWA	OFE	Note

Day Two

## 6 Strategy and Policy

<b>6.1</b>	Strategic goals and policies		
6.1.1	Drivers and trends	OFE	Discuss
6.1.2	Cross-committee coordination	All	Discuss
6.1.3	IALA Position on the Development of AtoN Services	OFE	Discuss
6.1.4	Revision of IALA Standards	MJ	Discuss
6.1.5	IALA's involvement in MASS	MJ	Discuss
6.1.6	Sustainability	SM	Discuss
<b>6.2</b>	Challenges and opportunities		
6.2.1	GMDRT potential project	MJ	Discuss
6.2.2	IMO STCW amendments	PD	Discuss
<b>6.3</b>	S1010 AtoN Planning and Requirements		
6.3.1	R1001 IALA Maritime Buoyage System	PD	Discuss
<b>6.4</b>	S1020 AtoN Design and Delivery		
6.4.1	Tsunami monitoring	MJ	Discuss
<b>6.5</b>	S1030 Radionavigation Services		
<b>6.6</b>	S1040 Vessel Traffic Services		
6.6.1	Introduction of new IMO Resolution	MS	Note
<b>6.7</b>	S1050 Training and Certification		
6.7.1	Distance learning	OFE	Note
<b>6.8</b>	S1060 Digital Communication Technologies		
<b>6.9</b>	S1070 Information Services		
6.9.1	IALA S-200 development	MJ	Note
6.9.2	Maritime Resource Name (MRN)	MJ	Discuss
6.9.3	Maritime Services	MJ	Discuss
6.9.4	Maritime ICT Proposal	MJ	Discuss
6.9.5	Guideline G1159 Ship reporting from a shore-based perspective	HN	Discuss
<b>6.10</b>	Committee work programme and structure		
6.10.1	Committee Work Programme 2018 - 2023 and 2023 - 2027	MJ	Review
6.10.2	Future committee structure	MJ	Discuss
6.10.3	Upcoming events		
6.3.10.1.	Workshop on AtoN engineering	SM	Discuss
6.3.10.2.	Workshop on S-100/200	PD	Discuss
<b>6.11</b>	Operations/Administration		
6.11.1	IALA Dictionary	MJ	Discuss
6.11.2	Communications	AG	Discuss
6.11.3	Committee facilitation	TS	Discuss
6.11.4	IALA Style Guide	TS	Note
<b>6.12</b>	Other		
6.12.1	IALA AtoN Questionnaire	MJ	Discuss
6.12.2	IALA NAVGUIDE	MJ	Note
<b>6.13</b>	The IGO project	FZ	Note

## 7 Any other business

## 8 Report of the meeting

## 9 Date and venue of next meeting

## 10 Closing of meeting

## ANNEX B LIST OF PARTICIPANTS

<b>ARM Committee</b>	<b>Chair</b>	Phil Day <a href="mailto:phild@nlb.org.uk">phild@nlb.org.uk</a>
	<b>Vice-Chair</b>	R. David Lewald <a href="mailto:robert.d.lewald@uscg.mil">robert.d.lewald@uscg.mil</a>
<b>ENAV Committee</b>	<b>Chair</b>	NOGUCHI Hideki <a href="mailto:hideki.noguchi@gmail.com">hideki.noguchi@gmail.com</a>
	<b>Vice-Chair</b>	Jorge Arroyo <a href="mailto:Jorge.Arroyo@uscg.mil">Jorge.Arroyo@uscg.mil</a>
<b>ENG Committee</b>	<b>Chair</b>	Simon Millyard <a href="mailto:simon.millyard@thls.org">simon.millyard@thls.org</a>
	<b>Vice-Chair</b>	Michel Cousquer <a href="mailto:Michel.Cousquer@cerema.fr">Michel.Cousquer@cerema.fr</a>
<b>VTs Committee</b>	<b>Chair</b>	Monica Sundklev <a href="mailto:monica.sundklev@transportstyrelsen.se">monica.sundklev@transportstyrelsen.se</a>
	<b>Vice-Chair</b>	Dirk Eckhoff <a href="mailto:dirk.eckhoff@wsv.bund.de">dirk.eckhoff@wsv.bund.de</a>
<b>LAP</b>	<b>Chair</b>	Christina Schneider <a href="mailto:Christina.Schneider@wsv.bund.de">Christina.Schneider@wsv.bund.de</a>
<b>IMC</b>		Malcolm Nicholson <a href="mailto:m.nicholson@sealite.com">m.nicholson@sealite.com</a>
<b>Secretary-General</b>		Francis Zachariae <a href="mailto:francis.zachariae@iala-aism.org">francis.zachariae@iala-aism.org</a>
<b>Deputy Secretary-General</b>		Omar Frits Eriksson <a href="mailto:omar.eriksson@iala-aism.org">omar.eriksson@iala-aism.org</a>
<b>Technical Operations Manager</b>		Minsu Jeon <a href="mailto:minsujeon@iala-aism.org">minsujeon@iala-aism.org</a>
<b>Technical Officer</b>		Thomas Southall <a href="mailto:tom.southall@iala-aism.org">tom.southall@iala-aism.org</a>
<b>Communications Officer</b>		Audrey Guinault <a href="mailto:audrey.guinault@iala-aism.org">audrey.guinault@iala-aism.org</a>



## ANNEX D LIST OF INPUT PAPERS

## ANNEX E LIST OF OUTPUT PAPERS

Meeting	Agenda Item	OUTPUT PAPERS
PAP44-	8.1	Report of PAP44



## ANNEX F ACTION ITEMS

<i>That the ENAV Committee to amend the draft recommendation and guideline on MASS to align the contents with the table contained in section 6.1.5 of the PAP44 report. Once amended the ENAV Committee would then circulate the draft to the other committees for them to work on their respective topics.....</i>	<i>14</i>
<i>ENG15 to consider the scope and timing for a workshop on Sustainability in the provision of AtoN.....</i>	<i>15</i>
<i>That committee chairs provide their committee's proposals, both in the task register template and the task plan template, for the Work Programme 2023 – 2027 to the Secretariat in order that a draft work programme can be input to the PAP. ....</i>	<i>18</i>
<i>That committee chairs submit input to PAP on any possible changes to the future committee internal structure. ....</i>	<i>18</i>
<i>That ENAV Committee develop the proposal for a workshop on digital maritime radiocommunication and submit it to Council for approval. ....</i>	<i>19</i>
<i>That the Secretariat will draft a non-bulky input for NCSR regarding an update on IALAs approach to maritime services and coordinate with the committees before submitting to IMO. ....</i>	<i>6</i>
<i>That the Secretariat organize and host an inter committee group meeting on the GI registry proposals.</i>	<i>7</i>
<i>That the Secretariat assist the IMC in drafting an input to the Council Strategy Drafting Group regarding an entry on visual AtoN for consideration for the Drivers and Trends document. ....</i>	<i>11</i>
<i>That the Secretariat amends the VTS Manual to reflect that only recommendations are normative or informative. Guidelines can never be normative or informative as they are a broad description of possible ways you may fulfil the provisions of a recommendation. ....</i>	<i>12</i>
<i>That the Secretariat is prepared to explain to the VTS committee that 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. ....</i>	<i>13</i>
<i>That the Secretariat forwards updated versions of the standards to LAP. ....</i>	<i>13</i>
<i>That the Secretariat and the LAP Chair develop guidance on the use of the words shall or should in IALA documentation and provide input to subsequent PAPs. ....</i>	<i>13</i>
<i>That the Secretariat provide an input paper to the committees regarding S-200 and the subsequent actions that the committees have to fulfil, particularly regarding the IHO GI register.....</i>	<i>16</i>
<i>That the Secretariat convene a meeting on maritime services that consider the issues laid out in the PAP44 report (section 6.9.3), provide input to the committees and then draft submissions for the IMO as necessary. ....</i>	<i>17</i>
<i>That the Secretariat will endeavor to obtain the ISO/CD 28005-1 document that deals with the Maritime Single Window. ....</i>	<i>17</i>

