





International Association of Marine Aids to Navigation and Lighthouse Authorities

ANNUAL REPORT 2021

SUCCESSFUL VOYAGES, SUSTAINABLE PLANET

This work is copyright. Reproduction for the purposes of commercial use or sale requires the written permission of the International Association of Marine Aids to Navigation and Lighthouse Authorities, 10 rue des Gaudines - 78100 Saint Germain en-Laye, France.



TABLE OF CONTENTS

•
10
11
12
13
1
1
1
10
17
1
1
1
1
1
1

NDUSTRIAL MEMBERS COMMITTEE (IMC)	19
THE TRANSITION TO AN	
NTERGOVERNMENTAL ORGANIZATION	20
THE TRANSFORMATION OF IALA FROM A NON-GOVERNMENTAL ORGANIZATION TO AN INTERGOVERNMENTAL ORGANIZATION IS WELL ON TRACK.	20
FINANCIAL RESULTS	22
FINANCIAL POSITION	22
THE WORLD-WIDE ACADEMY	23
THE IALA YEAR	24
MAIN RESULTS	32
HERITAGE LIGHTHOUSE OF THE YEAR	32
NEW PUBLICATIONS	32
NEW AND REVISED RECOMMENDATIONS	32
NEW AND REVISED GUIDELINES	32
MODEL COURSES	33
WORLD-WIDE ACADEMY	34
2020 AT A GLANCE	34
ONBOARDING ALL COASTAL STATES	35
ENLIGHTENING - RAISING THE AWARENESS OF HIGH-LEVEL DECISION MAKERS.	36
EDUCATING - PROVIDING TRAINING OPPORTUNITY TO ALL	37
ENGAGING - PURSUING LONG-TERM CAPACITY BUILDING	38

4 | www.iala-aism.org





A Message from THE PRESIDENT AND THE SECRETARY-GENERAL







Francis ZACHARIAE SECRETARY-GENERAL

It is sad to report that in the year under review Apart from the customary housekeeping business we continued to have Covid-19 in our midst. The on the agenda the Council approved that the necessary precautions were once again taken with committee meetings continuing in remote or virtual form and with the Secretariat staff working from

We remain optimistic for personal, face-to-face gatherings to be held once again and before too long in 2022.

It was found, however, that by taking account of time differences around the globe Microsoft Teams would enable a satisfactory exchange to be achieved for all participants with minimal inconvenience.

As the world continued to be in some form of confinement in 2021, our members' provision of aids to navigation and related services remained essential for the safety of navigation and the continuous flow of cargoes of the commodities upon which we all depend daily.

Our members who provide these services, and our industrial members who produce and deliver aids to navigation equipment, have followed the advice given by their governments and most of their personnel worked from home where possible. Of course some staff were required to attend their normal workplace due to the essential nature of their responsibilities when responding to outages and performing vital maintenance to keep their service operational. This dedication is praiseworthy and deserves repeating.

74th were successfully held by video conference in June and December. Despite the difficulties with communications a great spirit of cooperation was achieved at Council, testimony to the efforts that the IALA membership continuously provides around the world.

Secretariat updated our VTS documents with due consideration to the revised IMO Resolution A.1158 (32) on Guidelines for Vessel Traffic Services which was issued in January 2022. As we write the IALA Secretariat has in hand the necessary editorial work regarding updates of IALA documents in consultation with members.

Furthermore, Council approved issue of new guidelines and recommendations and examples can be found here on the IALA web site.

When placed alongside our manuals and model courses these issues originating in the technical committees demonstrate splendid international collaboration.

Demonstrative of the Council's efforts to enhance broad collaboration we welcomed two new National members representing Lebanon and The Gambia respectively with four new Associate members and twelve new Industrial members. This is a fine intake to boost our broad membership base and indicates the attraction of IALA.

On 1 July 2021, our worldwide membership celebrated the World Marine Aids to Navigation Day virtually. There were photographs of Marine Aids to Navigation shared through social media to tell the world how important members' assets are for global safety and efficiency of navigation and protection of the environment.

Two sessions of the IALA Council, the 73rd and At the same time we were able to introduce online contributions from members' officers in which they told how they saw their contributions to maritime

> Hand-in-hand with online activities have been Webinars held covering topics of interest for the maritime community. Our technical committee

undertaken and described the content of the documents that were produced. Development of guidance documents is key to IALA and these webinars have provided an opportunity to spread more knowledge about our technical advice, both to members and non-members.

They may be accessed on the IALA YouTube Channel to be found here: https://www.youtube. com/channel/UCvbSHKfXGTwNuSJ2OSvXClQ/ videos

With further consideration of capacity building we come to the IALA World Wide Academy inaugurated in 2012. During the pandemic, the accredited training organizations stopped delivering residential courses. In response to this, the Academy developed a suite of online versions of the IALA model courses. Over ten years the WWA model course format has been widely adopted to ensure that trained and certificated technicians install, maintain and operate aids to navigation to the highest international standards.

With regard to IALA's change of status from Non-Governmental Organization (NGO) to Inter-Governmental Organization (IGO) the high point of the year was the final signing ceremony of the Convention on the International Organization for Marine Aids to Navigation on 26 January 2022 at HQ here in St Germain-en-Laye.

This ceremony marked the end of the one-year signature period which started on 27 January 2021 in Paris where France, as Depositary State, represented by Mme Annick Girardin, Minister for Marine Affairs, was the first State to sign the Convention.

Until the date of this year's signing 24 Member States had applied their signatures and on the day a further 27 signed making the two groups the 51 Founding States of the new international organization.

participants highlighted the work they have On that day M Fabien Penone, Director, French Ministry for Europe and Foreign affairs, United Nations, International Organizations, Human Rights and Francophonie Directorate, welcomed distinguished diplomatic visitors to IALA. In his address he confirmed that France is delighted to host the headquarters of IALA, created in 1957, the future international organization.

> The transformation of IALA into an international organization represents a significant step forward in ocean governance. Complementary to the IMO, this new international organization will strengthen the consideration of issues specific to the maritime environment. Additionally this transformation also reflects recognition of the major and growing role of IALA in this field.

> We anticipate many other States will follow to accede to the Convention which will come into force when 30 States have ratified the Convention.

> Plans are well advanced for the 20th IALA Conference scheduled from 27 May to 3 June 2023 in Rio de Janeiro with the theme: Marine Aids to Navigation - Innovation for a Sustainable Future. We look forward to meeting you there as we hear competent presentations on: Digital connectivity technologies in Marine Aids to Navigation; Marine Aids to Navigation in an increasingly autonomous and virtual world; Exchange of information, challenges and implementation; Cyber Risk and Resilient services and much more.

> In the following pages we record some of the year's achievements at IALA often arrived at through difficult times and conditions, testament to our resilient members and able Secretariat and to whom we are extremely grateful.

> We state, without doubt, that IALA is in capable hands, well-financed, soundly managed and continuing to flourish.

www.iala-aism.org | 7 6 | www.iala-aism.org

UNDERSTANDING IALA

IALA'S CORE VALUE

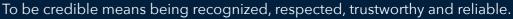
Established in 1957, IALA is a not-for-profit, international technical association. It brings together Marine Aids to Navigation authorities, manufacturers, consultants, and scientific and training institutes from across the globe to exchange and compare experiences and knowledge for the improvement and harmonization of maritime navigation services worldwide.

The work of IALA in creating technical guidance documentation, and in training and capacity building, is focused towards achieving the goals of a Strategic Vision by 2026.

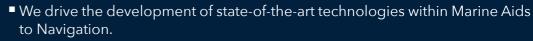
IALA encourages its members to work together in a common effort to harmonize Marine Aids to Navigation (AtoN) worldwide and to ensure that the movements of vessels are safe, expeditious and cost effective while protecting the environment.

Taking into account the needs of mariners, developments in technology and the requirements and constraints of marine aids to navigation authorities, a number of technical committees have been established bringing together experts from around the world. Their work ensures that mariners have AtoN which will meet their needs both now and in the future. Thus IALA contributes to a reduction of marine accidents, increased safety of life and property at sea, as well as the protection of the marine environment.

CREDIBLE To be credible







■ We engage the world's leading experts to develop our products.

DYNAMIC

To be dynamic means actively and continuously striving to improve.

- We respond quickly to the needs of the maritime community.
- We adopt flexible working arrangements to stay agile.
- We encourage and stimulate innovation through awareness of global maritime developments.

RESULT-ORIENTED



To be result-oriented means to focus on outcomes rather than processes.

- We set clear objectives and goals with defined timelines.
- We create high-quality technical documents that are practical, usable and easily accessible.
- We produce outcomes that are non-political and non-commercial.

CONNECTING



To be connecting means to reach out to individuals and organizations in order to share knowledge and experience and to provide support to achieve common goals

- We welcome individuals and organizations from around the world.
- We bring together experts and facilitate exchange of knowledge and experience.
- We assist the maritime community in meeting its international obligations.

8 | www.iala-aism.org

STRATEGIC VISION FOR 2018-2026

SECRETARIAT

The Strategic Vision for 2026 sets out two Goals and eight Strategies to facilitate their achievement by 2026. The two Goals are, respectively, that Marine Aids to Navigation are developed and harmonized through international cooperation and the provision of standards (Goal 1), and that all coastal States have contributed to a sustainable and efficient global network of Marine Aids to Navigation through capacity building and the sharing of expertise (Goal 2).



SUSTAINABLE GALS DEVELOPMENT GALS



Through continued improvement of standards, IALA promotes safe and efficient shipping and the economic growth it supports.



Through continued improvement of standards, IALA promotes safe and efficient shipping which contributes to sustainable



Healthy oceans are critical. IALA continues to develop standards that contribute to clean and abundant coastlines and oceans.



IALA World-Wide Academy sets the global standards for training and capacity building in the provision of Marine Aids to Navigation.



IALA supports gender equality and empowers women in the maritime sector.



IALA recommends sustainable and environmentally friendly management principles in relation to all Marine Aids to Navigation activities.



IALA continues to encourage the use of renewable energy.



IALA promotes capacity building and career advancement through the World-Wide Academy and its missions and training programs.



IALA promotes innovation and recognizes the importance of the involvement of the Industrial members within its committee



IALA World-Wide Academy focuses on those coastal states with the greatest need, in order to assist them to fulfil their SOLAS obligations.



IALA provides quidance on sustainable and environmentally responsible activities within



IALA continues to promote sustainability and an ethos of environmental management in the design, operation and disposal of Marine Aids to Navigation.



IALA continues to encourage the use of renewable energy.



IALA sets global standards for the provision of Marine Aids to Navigation, contributing to the protection of the marine environment.



Life on land is supported by marine transport, IALA continues to develop alobal standards for Marine Aids to Navigation provision.



IALA aims to bring together Governments, services and organizations to strive for the improvement and harmonization of Marine Aids to Navigation. IALA works closely with the IMO, IHO and





The Secretariat is based in Saint-Germain-en-Laye, near Paris, France and consists of 12 permanent staff members. Additionally, several experts and consultants assist the Secretariat in various areas.

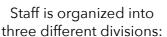


The Secretary-General acts as the legal representative of IALA and oversees the operations of the Association.









- Technical Operations,
- Administration and Finance,



■6 female staff ■World-Wide Academy. • from 9 different nationalities.

> A part time student was recruited in October to be trained in the view of replacing a staff member who was to

> > retire in 2022.

There are









The Secretariat



















10 www.iala-aism.org www.iala-aism.org | 11 ____

MEETINGS

MEMBERSHIP







COMMITTEES	PARTICIPANTS	COUNTRIES
ARM 13	94	30
ARM 14	94	27
ENAV 27	134	33
ENAV28	122	32
ENG 13	129	30
ENG14	114	30
VTS 50	170	33
VTS51	151	33

WORKSHOPS	PARTICIPANTS	COUNTRIES
Mass Workshop	109	29
Cybersecurity Workshop	64	-
ERPS Workshopr	53	29

CATEGORIES

IALA comprises four membership categories:



National membership:

National Authorities legally responsible for the provision, maintenance or operation of Marine Aids to Navigation in their countries.



Associate membership:

Services, organizations, scientific agencies concerned with Marine Aids to Navigation or related matters.



Industrial membership:

Manufacturers, distributors and organizations providing Marine Aids to Navigation equipment for sale and Marine Aids to Navigation services or technical advice under contract.



Honorary membership:

Conferred for life to individuals who are considered by the Council to have made an important contribution to the work of IALA.

__ 12 | www.iala-aism.org







STATUS

In 2021, IALA was joined by twenty new members: two National members, five Associate members and thirteen Industrial members.

National membership was joined by: Turks and Caicos Island Government in the Turks and Caicos' Island; the Directorate General of Land and Maritime Transport in Lebanon bringing the number of National members up to 90 in 2021.

The following organisations joined as Associate members: Engie Fabricom in Belgium; The Sasakawa Peace Foundation in Japan; TWL Logistics Ltd in Papua New Guinea; Porto Do Açu Operaçoes SA in Brazil; and Korea Maritime Institute in the Republic of Korea. In 2021, Associate membership of IALA consists of 74.

IALA has also welcomed the following Industrial members: Safe Sea Service FZCO and North West Marine Equipment Trading LLC

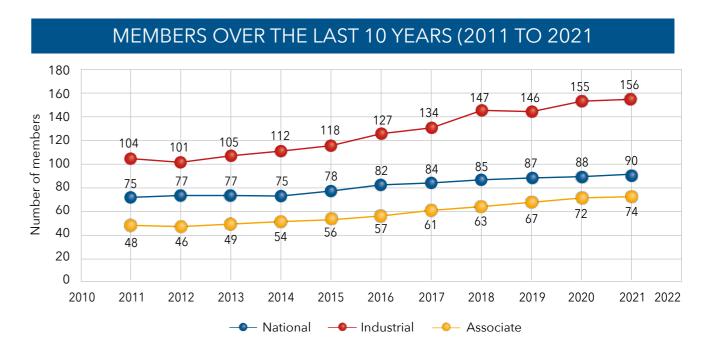
in the United Arab Emirates; Indianic Group Pty, Ltd in Australia; Spire Global Luxembourg Sarl. in Luxembourg; Shanghai Space Information Technology in the People's Republic of China; ATCO (Ports Management and Services) in Saudi Arabia; IHS Markit, Maritime and Trade in the United States of America; Navmoor Limited in the United Kingdom; MarinTel LLC in Azerbaijan; Emepa S.A in Argentina; Tecotrex Welding Marine in Qatar; Airbus Defence and Space in France; and DuckSung Ocean Development Co., Ltd in the Republic of Korea. in 2021, IALA counted 156 Industrial members.

The membership growth was nevertheless impacted by a few resignations noted along the year and some terminations proceeded by the IALA Council in December for non-payment of contributions after the Secretariat had exhausted all efforts to collect the debts.

On 31st December 2021, IALA membership consists of 320 in the above three categories, which is 2% more compared to 2020. In addition, IALA also counts 41 Honorary members.

EVOLUTION

The figure below shows the membership evolution in the last ten Years and the map gives an overview of the IALA National membership around the world in 2021.



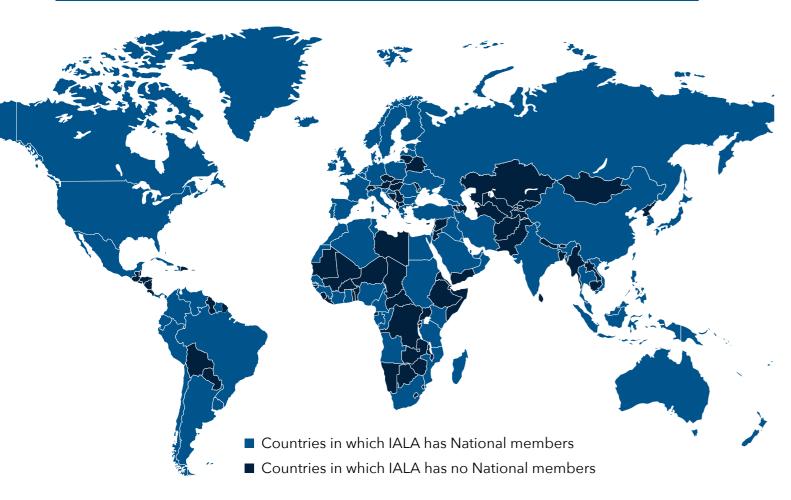


www.iala-aism.org | 15 _

IALA NATIONAL MEMBER IN 2021

GOVERNANCE

IALA NATIONAL MEMBERS IN THE WORLD IN 2021



90 National members

156 Industriel members

74 Associate members



GENERAL ASSEMBLY

The General Assembly brings together members from all the IALA membership categories every four years and usually convenes in conjunction with the four-yearly IALA Conference.

National members attending the General Assembly are entitled to:

- determine the IALA strategy
- elect members to the Council
- decide upon changes to the IALA Constitution
- decide on IALA Standards (from 2018 onwards)

Associate and Industrial members are entitled to attend the General Assembly and take part in the discussions, but they do not have the right to vote.



COUNCIL

IALA is headed by a President elected by the Council.

The Council comprises 21 elected and three non-elected members. It approves the strategic direction, the annual budget, and the rates for members' annual contributions.

The three non-elected members are a National member of the Host Nation (France), the National member which hosted the previous IALA Conference and the National member which will host the next Conference.

16 | www.iala-aism.org www.iala-aism.org | 17 _



FINANCE AND AUDIT COMMITTEE (FAC)

The Finance and Audit Committee (FAC) consists of five members who are elected from amongst the members of the IALA Council. The FAC elects its Chair, who acts as IALA Treasurer.

The role of the FAC is to provide, twice a year to the Council, recommendations related to financial matters including the execution of the budget; investments; audit observations and the status of membership contributions.



POLICY ADVISORY PANEL (PAP)

The Deputy Secretary-General chairs meetings of the Policy Advisory Panel (PAP), which advises the Council on strategy and policy matters related to the technical activities. The PAP convenes twice a year and its members include the four Committee Chairs and Vice Chairs, the Chair of the Legal Advisory Panel, the Dean of the World-Wide Academy and a member of the Industrial Members Committee.



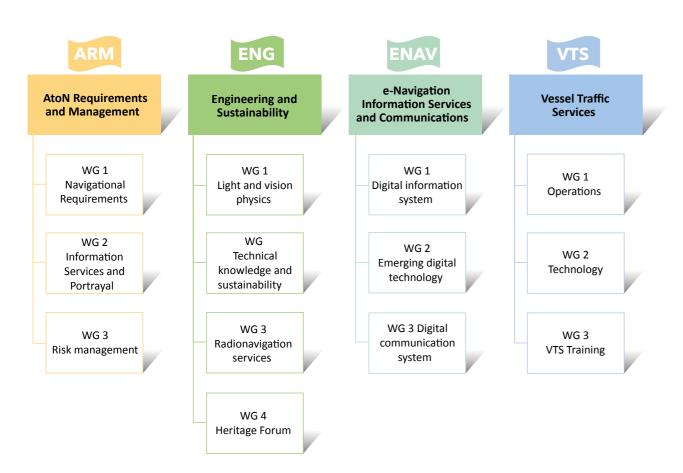
LEGAL ADVISORY PANEL (LAP)

The Legal Advisory Panel (LAP) is an advisory body to the Council on legal aspects of all technical activities. The LAP also took intensive part in the work on the planned change of IALA status, mainly through extraordinary meetings. During the period under review the LAP was chaired by Ms Christina Schneider of Germany. The LAP meets normally twice a year.



COMMITTEES

Committees are the 'engine room' of IALA. They are organized in 4 work domains as follows:



INDUSTRIAL **MEMBERS** COMMITTEE (IMC)

The Industrial members form an integral part of the IALA family and the ARM, ENG, VTS and ENAV Committees is where they jointly provide valuable technical knowledge and first-hand experience to IALA. The Industrial Members Committee (IMC), which consists of six elected companies Industrial members of IALA, is the organ that takes care of the Industrial members' interests within IALA. The IMC is an observer at IALA Council and at meetings of the Policy Advisory Panel.

The IMC for the year 2021 comprised the following:

Tideland Signal Corporation (USA) **Americas:**

Asia/Oceania: Zeni Lite Buoy Co Ltd. (Japan)

Europe/Africa: Sabik (Finland)

Arbo Plasticos Rotomoldados Ltda Brazil (next Conference host):

Member at large: Australian Maritime Systems (Australia)

Member at large: Sealite Pty Ltd. (Australia)

The IMC met twice virtually in the year 2021. They mostly discussed the preparations for the Conference 2023 and the challenges brought by the postponement of the event. To help with the planning, a survey was sent to all industrial members to know the intentions of participation.

The good result was encouraging, and preparation progressed. A code of conduct was under development to be presented at the industrial members General Assembly in 2023.



www.iala-aism.org | 19 _ 18 | www.iala-aism.org

THE TRANSITION TO AN INTERGOVERNMENTAL ORGANIZATION

THE TRANSFORMATION OF IALA FROM A NON-GOVERNMENTAL ORGANIZATION TO AN INTERGOVERNMENTAL ORGANIZATION IS WELL ON TRACK.

The first signing ceremony of the Convention on the International Organization for Marine Aids to Navigation was held on 27 January 2021 in Paris and as depositary State of the Convention, France, represented by Mrs. Annick Girardin, Minister for Marine Affairs, was the first State to sign the Convention.

This ceremony marked the opening for signature of the Convention for a period of one year. All Member States of the United Nations, and in particular the other signatories of the Final Act of the Kuala Lumpur Conference, were invited to sign the Convention at the Protocol of the Ministry for Europe and Foreign Affairs.

A final signing ceremony was held at the last day of the signature period on 26 January 2022 in the IALA HQ in St. Germain en Laye. During the year 51 States have signed the Convention and five States have ratified or accepted the Convention.

States that have signed the Convention are then invited to transmit the instruments of ratification, acceptance or approval to France, the depositary State. All Member States of the United Nations that have not signed during the signature period, may accede to the Convention, which will enter into force on the ninetieth day after the date of deposit of the thirtieth instrument of ratification, acceptance, approval or accession.

The certified versions of the Convention in Arabic, Chinese, English, French, Russian and Spanish can be found on the IALA web site https://www.iala-aism.org/the-igo-project/

The Secretariat has started the detailed preparation for the transition period between the start of the new organization and the termination of the present association which is regulated in the annex to the convention: The Transitional Arrangements. The present Constitution and the Transitional Arrangements regulates the transfer of assets and liabilities, the termination of the present IALA, the governance of the new organization and the transfer of members from the present IALA to the new intergovernmental organization.







20 | www.iala-aism.org



FINANCIAL RESULTS

The Organization has implemented financial and regulatory measures to ensure business continuity despite the ongoing pandemic in 2021.

Boosted by the change of status project, IALA continued to attract new members resulting in an excellent collection rate of the membership contributions which represent the main source of income for the Organization. At the same time, savings were generated as a result of lower-than-expected expenses due to the pandemic and reduced travels.

IALA closed its financial year with a net consolidated surplus of €400,787 which was allocated to financial reserves in anticipation of the expenses of the IALA Conference planned in 2023 and to meet, when the time comes, certain expenses related to the change of status.

All detailed financial statements together with the statutory report of the auditor, are available on the IALA website.

INCOME STATEMENT (IN €)	2021	2020
Operating income	3 311 214	3 692 033
Operating expenses	2 938 716	3 436 991
OPERATING RESULT	372 498	255 042
Interest and other financial income	8 302	9 731
Interest and other financial expenses	2 712	1 283
FINANCIAL RESULT	5 590	8 447
Exceptional income	31 589	31 713
Exceptional expenses	7 785	38 695
Exceptional result	23 804	(6 982)
CORPORATE TAX ON PROFIT	1 106	2 144
Total income	3 351 105	3 733 478
Total expenses	2 950 318	3 479 114
RESULT FOR THE FINANCIAL YEAR	400 787	254 363

BALANCE SHEET (AT DECEMBER 31)	2021	2020	
Assets			
Intangible assets	3 822	9 058	
Property, plant & equipement	1 678 209	1 801 851	
Finacial assets	38 727 10 477		
Receivables	53 090	358 208	
Availables funds & prepaids expenses	3 996 873	3 530 798	
TOTAL NET ASSETS	5 770 721	5 710 394	
Assets			
Not-for profit permanent funds	3 504 974	3 432 198	
Reserve for associative project (Conference)	150 000	0	
Result fot the financial year	400 787	254 363	
Designated funds	240 868	621 346	
Provisions for risk and charges	627 734	537 549	
Debts	846 358	864 936	
TOTAL NET ASSETS	5 770 721	5 710 394	



The World-Wide Academy operates under a distinct budget based on an annual Action Plan endorsed by the Academy Board. The Academy is wholly funded from direct or in-kind sponsorship from external donors including the International Foundation for Aids to Navigation (IFAN), IMO, Trinity House, France, Malaysia, Singapore and Republic of Korea. Unused sponsorships in 2021 for €K240 remain in the respective dedicated funds for future use in 2022.

WWA financial situation for the period January to December 2021 (in Euros)

	IFAN/France/ Trinity House	South Korea	Malaysia	IMO	Singapore	TOTAL
Total REVENUE	135 058	112 174	100 000	16 829	-	364 061
Education and Training	29 616	91 917	29 180	-	-	150 713
Capacity Building	11 244	-	76 085	-	-	87 330
Research & development	-	4 694	-	-	-	4 694
Other Academy related	109 643	16 420	-	-	-	126 063
Permanent staff's costs	375 738	-	-	-	-	375 738
Total EXPENSES	526 242	113 031	105 265	-	-	744 538
Income against Expenditure	(391 185)	(857)	(5 265)	16 829	-	(380 477)
Reserve from previous year	612 218	419	6 206	1 479	1 023	621 346
Total available	221 032	(437)	941	18 308	1 023	240 868

22 | www.iala-aism.org | 23 _



THE IALA YEAR



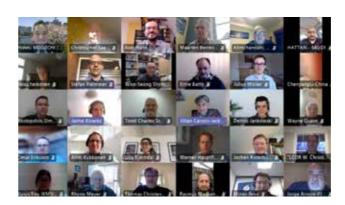
MARCH

ENAV27

The 27th meeting of the ENAV Committee was held virtually from 1 to 26 March 2021; chaired by Hideki Noguchi and vice-chaired by Jorge Arroyo. The Secretary for the meeting was Jaime Alvarez.

There were 134 participants, 28 for the first time, from 33 countries and 8 organisations; and 3 observers.

This was the 5th meeting for the 2018-2022 Work Programme and the Committee considered 34 input papers and produced 16 output papers.



VTS50

The 50th meeting of the VTS Committee was held from 10 - 31 March 2021 virtually with Monica Sundklev as Chair and Dirk Eckhoff as Vice-Chair. The Secretary for the meeting was Thomas Southall.

170 Participants from 33 countries, five Sister organisations participated in VTS50. 41 participants attended for the first time.

The VTS Committee considered 93 input papers and produced 42 output papers, including working papers, from three Working Groups.

The meeting was carried out in accordance with the updated Virtual Committee Arrangements online. Approximately 84 meetings were arranged.



FEBRUARY

PAP41

The 41st session of PAP was held virtually for the first time over three sessions on 3 - 5 February 2021.

The PAP was updated on the latest decisions made at Council 72.

The current Work Programme and cross-committee cooperation on various subjects were discussed.

The PAP noted that Ms Annick Girardin, Minister for Maritime Affairs of France, has signed the Convention on the International Organization for Marine Aids to Navigation on 27 January 2021 on behalf of the French Republic. The Convention is now open for signature by interested States during the next 12 months.

The PAP agreed to establish a proposed MASS group that will report to PAP, and that the Secretariat finalizes the terms of reference for the group. PAP also agreed that the Netherlands should provide the chair and Singapore the vice chair.



ENG13

The 13th meeting of the ENG Committee (ENG13) was held virtually from 22 March to 19 April 2021.

The session was attended by 129 registered participants from 30 countries. 30 participants

 $24 \mid$ www.iala-aism.org



IALA

APRIL

ARM13

The 13 th Session of the ARM Committee was held virtually from 13 to 28 April 2021 with Phil Day as Chair and Dave Lewald as Vice-Chair. The Secretary for the meeting was Thomas Southall.

94 Participants from 30 countries participated in ARM13. 26 participants attended for the first time.



MASS Workshop

The workshop on Marine Aids to Navigation in the autonomous world was held on 20 and from 24 to 28 May 2021 as a virtual IALA workshop. The workshop was very well attended by 109 participants from 29 countries. The workshop participants considered the various presentations that were made and the results of the two working groups.



The ARM Committee continued the work for the 2018 - 2022 work period. Working in three working groups, the Committee considered 82 input papers and produced 36 output and working documents.

The meeting was carried out in accordance with the Virtual Committee Arrangements online. Approximately 32 meetings were arranged

JUNE

Council73

The 73rd session of the IALA Council was held by video conference from 8 to 10 June 2021. The Council proceeded in a good spirit although the pandemic was still very much present in everyone's mind. Business went as usual with activity reports from the Secretary-General, the deputy Secretary-General, the Dean and 7 members who submitted National Matters. Information about the progress on the change of status and a provisional timeline for the planning of the future steps was provided.

Since the IALA Heritage Lighthouse of the Year Award was established in 2019, the Engineering committee reviewed a high number of nominations submitted, emphasising the variety and cultural value of lighthouses around the world. In total, 29 nominations from 18 member countries were received for consideration. The Council decided to award Cape Byron lighthouse, Australia the title of IALA Heritage Lighthouse of the Year 2021.

The Council approved three recommendations and nine guidelines, and one workshop as well as the extended committee work programme for 2018-2023.

JULY

World Marine Aids to Navigation Day

The principal objective of this day is to promote greater awareness of IALA and its work by bringing to the attention of the wider public the role of marine aids to navigation and the significance of IALA's technical work in enhancing the safety of navigation and protection of the environment worldwide.

Last year, 2020, the Bulgarian Port Infrastructure Company was the host to celebrate the event in Burgas but due to Covid-19, it was postponed to this year. Alas, the pandemic-driven situation has prevailed again.

So IALA celebrated the Day on 1 July by way of a Webinar and retaining the same theme: Marine Aids to Navigation - Successful Voyages, Sustainable Planet.

Member organisations around the world were encouraged to hold parallel events and to post photographs of marine aids to navigation on their social media sites with others published on a dedicated space on the IALA website. Here examples can be seen at: https://www.iala-aism.org/news-events/news/

A webinar enabled representatives from Chile, Somalia, Scotland, China, Brazil, Australia, Japan, and Bulgaria with the user, the Nautical Institute, to speak of their activities and the meaning of IALA. This may be seen on the You Tube channel here: https://www.youtube.com/watch?v=ucHVohQnvYw

SEPTEMBER

PAP42

The 42nd session of PAP was held virtually over three sessions held between 8 - 10 September 2021.

Key outcomes included:

- The current and future work programmes and proposals for better cross-committee cooperation were discussed. It was agreed that a further PAP session on this topic will be convened in November 2022.
- Consideration of a maritime ICT proposal from the Republic Of Korea.
- The IMO have adopted IALAs input on the IMSAS manual.
- IALA has a new domain in the IHO Portrayal Register.

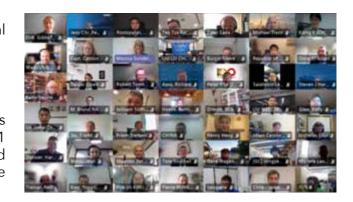
VTS51

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 VTS Committee considered 108 input papers and produced 40 output papers, including working papers, from three Working Groups.

The meeting was carried out in accordance with the updated Virtual Committee Arrangements online. Approximately 60 meetings were arranged.meeting was carried out in accordance with the Virtual Committee Arrangements online. Approximately 63 meetings were arranged.



26 | www.iala-aism.org | 27 ____





OCTOBER

ENG14



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 inputs and produced 8 output documents.

ENAV28

The 28th meeting of the ENAV Committee was held virtually from 11 to 29 October 2021; chaired by Hideki Noguchi and vice-chaired 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.

This was the 6th meeting for the 2018-2022 Work Programme and the Committee

considered 38 input papers and produced 6 output papers.







ARM14



The 14th 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 Committee continued the work for the 2018 - 2022 work period. Working in three working groups, the Committee considered 86 input papers and produced 43 output and working documents.

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

LAP22

The 22nd session of the Legal Advisory Panel was held by video conference on 26 October 2021, with Christina Schneider as Chair, Henning Osnes Teigene as Vice-chair and Audrey Guinault as Secretary. The LAP noted the reports from Council 72 & 73, PAP 41 & 42 and the last committee sessions. The LAP was informed about the change of status progress since the Diplomatic Conference and the opening for signature of the convention. LAP

was briefed on the timeline established by the Secretariat for the transfer of the organization when the Convention enters into force. The LAP was briefed on the creation of a MASS task force and was given an overview of the ongoing work by the chair of the task force. The LAP considered the reply from IHO about the mapping of the polar regions and will inform the ARM committee in this regard. The rest of the meeting was routine business including the review of the Risk Registers for IALA and the World-Wide Academy.

28 | www.iala-aism.org | 29 _



NOVEMBER

Cybersecurity workshop

The workshop on Cyber security was held on 12 November 2021 and from 15 to 19 November 2021 as a virtual IALA workshop. The workshop was attended by 64 participants plus three members of the IALA secretariat. The Chair of the workshop was Phil Day and the hosting country was Canada. There were 2 working groups.



ERPS workshop

The workshop on ERPS standardisation was held between the 29 of November and 1 December 2021. The workshop was attended by 53 participants from 29 countries

DECEMBER

Council74

The 74th session of the IALA Council was held by video conference from 13 to 17 December 2021. The Council approved two recommendations, twelve guidelines and three model courses. The Council noted the financial reports and approved the 2022 budget. The Council agreed on the Drivers and Trend document and to gather the Council Strategy Group before C75 for further work. The Council approved the revised Committee work programme for 2018-2023. The Council approved that the Secretariat updates the VTS documents with the revised IMO Resolution A.1158(32) on Guidelines for Vessel Traffic

Services. The Secretariat has already started the editorial work and will share the updates with the members. Reports were given on the Digital at Sea Asia-Pacific Conference, the IMC survey results on the planning of the 20th Conference, and the progress and future actions of the World-Wide Academy.





30 | www.iala-aism.org | 31



MAIN RESULTS



HERITAGE LIGHTHOUSE OF THE YEAR

Council 73 decided that Cape Byron Lighthouse , Australia was the IALA Heritage Lighthouse of the Year 2021.



NEW PUBLICATIONS

NEW AND REVISED RECOMMENDATIONS:

- R0143 Provision of Virtual Aids to Navigation, Ed2.0, June 2021
- R1022 Provision of GNSS Augmentation Service for maritime applications, Ed1.0, June 2021
- ■R0110 Rhythmic characters on Aids to Navigation Ed5.0, June 2021
- R0139 The marking of man-made offshore structure, Ed3.0, December 2021
- R0126 The Use of AIS in Marine Aids to Navigation Ed2.0, December 2021

"" NEW AND REVISED GUIDELINES:

- ■G1081 Provision of Virtual Aids to Navigation, Ed.2.0, June 2021
- G1143 Unique Identifiers for Maritime Resources, Ed3.0, June 2021
- •G1159 Ship Reporting from a shore-based perspective, Ed1.0, June 2021
- G1134 Surface colours used as visual signals on AtoN, Ed2.0, June 2021
- G1160 Competencies for planning and implementing a VTS, Ed1.0, June 2021
- G1141 Operational procedures for delivering VTS, Ed2.0, June 2021
- G1132 on VTS Voice Communications and Phraseology, Ed 2.0, June 2021
- •G1017 on Assessment of prior learning exemption for VTS model courses, Ed2.0, June 2021
- •G1161 Evaluation of Platforms for the Provision of Maritime Services in the Context of e-Navigation Ed1.0, June 2021
- G1078 The Use of AtoN in the Design of Fairways & Channels, Ed2.0, December 2021
- G1054 Preparing for an IMO Audit on Aids to Navigation Service Delivery, Ed2.0, December 2021
- ■G1162 The Marking of Offshore Man-made Structures, Ed1.0, December 2021
- G1163 The Marking of Breakwaters and barriers, Ed1.0, December 2021
- G1164 Management Of Maritime Resource Name Organisation Identifiers, Ed1.0, December 2021

- G1065 AtoN Signal Light Beam Vertical Divergence, Ed4.1, December 2021
- G1165 on Sustainable Structural Design of Marine Aids to Navigation Ed1.0, December 2021
- •G1014 on Accreditation of VTS Training Organizations and Approval to Deliver IALA VTS Model Courses Ed4.0, December 2021
- G1110 Use of Decision Support Tools for VTS personnel, Ed2.0, December 2021
- G1166 VTS in Inland Waters, Ed1.0, December 2021
- G1167 VTS Management, Ed1.0, December 2021
- •G1128 The specification of e-navigation technical service Ed1.3, December 2021

MODEL COURSES

- Model Course C2001-8 L2 Module 1.13 Maintenance of Steel Buoys Ed3.0, December 2021
- Model Course C2001-9 L2 Module 1.14 Power Sources on Buoys Ed3.0, December 2021
- Model Course C2007-1 L2 Module 7.1&2 Racons Ed3.0, December 2021



www.iala-aism.org | 33 _



WORLD-WIDE ACADEMY



2021 AT A GLANCE









- •63 Professionals from 21 countries qualified in AtoN and/or Risk management
- 3 Technical needs assessment and review missions conducted
- 8 international awareness events and meetings attended
- •933 engaged in events organized by the academy



ONBOARDING ALL COASTAL STATES

The IALA World-Wide Academy focuses on facilitating the effective implementation of IALA standards, recommendations, guidelines and model courses by coastal States through education, training and capacity building thereby underpinning the second strategic goal of IALA.

The Academy aims to ensure that all coastal States can fulfil the obligations related to Marine Aids to Navigation placed upon them in SOLAS Chapter V and that all coastal States can claim conformance with the relevant IALA standards.

To achieve these goals, the Academy undertakes a wide range of activities based on three simple principles:



raise the awareness of high-level decision makers of their internationnal obligations relating to safety of navigation



provide a suite of relevant education and training opportunities for as many as possible



pursue long-term capacity building activities with coastal States and provide advice on how overcome challenges

In support of the United Nations Delivering as One approach, the Academy cooperates with and coordinates its activities with other international organizations, underpinning the United Nations Sustainable Development Goals.

Throughout the year, the pandemic influenced the ability to host face to face awareness and training events as well as physical needs assessment and follow up visits to coastal States in need of assistance. The Academy therefore improved further its skills and capacity to conduct such activities online throughout the year.



 $34 \mid$ www.iala-aism.org $\mid 35 \mid$ _





ENLIGHTENING-RAISINGTHEAWARENESS OF HIGH-LEVEL DECISION **MAKERS**

The Academy continued with the concept of webinars to enlighten, educate, and engage with individuals world-wide.

In an effort to increase its global outreach, the Academy delivered a series of webinars on various AtoN related topics in the French language. These webinars were aimed at addressing specific needs of French speaking African countries. Also, a workshop on Maritime Autonomous Surface Ships (MASS) was conducted in the Spanish language. Both events were successful and well attended. A series of VTS related webinars touching on subjects as VTS implementation, training and authorisation were also delivered. All these webinars have been made available on the IALA You Tube Channel together with several Academy News items on various topics.

Work with sister organizations such as the IHO and the IMO continued, albeit in an online format. The Academy was represented at the IMO Technical Cooperation Committee meeting, which forms a strong base for international cooperation with coastal States in need and sister organisations. The Academy continued to be represented at various regional hydrographic commission meetings, some of which were residential, and some hybrid or fully online. Contacts made during these meetings resulted in agreements on technical cooperation with several States in need.

Once IALA transforms into an Intergovernmental organization, IALA will adopt the six official languages of the United Nations but keep English as the working language. Preparing for this change, the Academy has established translation support teams for French and Spanish. The Spanish support team was very active throughout the year demonstrating good progress and has become a driving force behind various initiatives addressing the needs of Spanish speaking countries.



EDUCATING - PROVIDING TRAINING OPPORTUNITY TO ALL

The opportunities for face-to-face training were once again severely restricted throughout the year, however, the Academy continued its work on the development and modernization of its suite of training programmes. Work to modernize and refresh the popular Level 1.1 Marine Aids to Navigation Manager and Level 1.3 IALA Risk Management Tools programmes continued with further development of interactive learning materials for online and distance learning using a customised e-Learning platform. The new learning materials use modern educational software to allow participants to interact with the subjects at hand as well as embedding activities, custom made videos and the practical use of the IALA standards to consolidate learning.

The completely redesigned courses on the IALA Risk Management Toolbox were programmed to be delivered online on a fixed cyclic schedule and this is now well in hand.



The new course on the principles of effective procurement was developed further and scheduled to be delivered online early 2022. The course covers content such as the preparation of business cases, specifications, and tenders in a manner consistent with best industry practice and taking account of the relevant IALA standards.

Close contact was maintained with the global network of accredited training organizations throughout the year, but none of them was able to deliver residential courses during the year. The Academy continued to develop its relationship with the ASEAN Regional Training Centre for VTS in Malaysia, however no residential training took place there throughout the year.

The Academy continues to provide support to the IALA technical committees in order to maintain and develop further the IALA model courses and associated guidance on training and certification.

36 | www.iala-aism.org www.iala-aism.org | 37 ____





ENGAGING - PURSUING LONG-TERM CAPACITY BUILDING

Due to the pandemic, the programme of capacity building activities, which normally relies heavily on face-to-face contact and on-site activities has been severely disrupted.

As soon as the travel restrictions were lifted, technical cooperation visits were recommenced. Technical needs assessment Missions to Lebanon and El Salvador took place in the second part of the year. The objective of both missions was to assess the adequateness and effectiveness of systems in place for providing Aids to Navigation services. These visits generate a technical report indicating the level of compliance with IALA Standards and provide a number of recommended actions aimed at improving compliance.

The Lebanese Ministry of Transport and Public Work signed IALA national membership application during the mission and further technical cooperation was agreed, including training and the facilitation of a risk assessment initiative.

As a follow-up on the El Salvador mission the Dean of the Academy participated to the high-level regional event "Port Meeting of the Central American Isthmus, REPICA".

A review mission was conducted in Guatemala. This was a follow-up of a technical needs assessment mission that took place in 2017. During the review an inspection to Rio Dulce took place in order to assist Guatemala with further maritime developments in this region.

Online technical cooperation activities were in progress with several countries, for example with Mexico on Vessel Traffic Services and with Somalia and Yemen on AtoN services.







ANNUAL REPORT 2021

SUCCESSFUL VOYAGES, SUSTAINABLE PLANET

10, rue des Gaudines - 78100 Saint Germain en Laye, France Tél. +33 (0)1 34 51 70 01- Fax +33 (0)1 34 51 03 00 - contact@iala-aism.org www.iala-aism.org

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