

ANNUAL REPORT 2018



SUCCESSFUL VOYAGES, SUSTAINABLE PLANET

© This work is subject to 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.

SUCCESSFUL VOYAGES, SUSTAINABLE PLANET

TABLE OF CONTENTS

About IALA	04
A Message from the President and the Secretary-General	04
Message de la Présidente et du Secrétaire Général	06
2018: an exceptional year	30
Key Iala Activities and Events	80
13 th General Assembly	10
Report on IALA Activities and Finance	10
Amendments to the IALA Constitution	10
Approval of the Strategic Vision 2018-2026	10
Approval of IALA Standards	12
Establishment of an Annual World Marine Aids to Navigation Day	13
General Assembly Resolutions	14
Council election	14
19 th Conference	16
Main Business of the Conference	16
Summary of Technical Conference Sessions	16
Other Conference features	17
World Lighthouse Heritage Exhibition	17
Incheon Declaration on Lighthouses as Cultural Heritage	17
IALA Conservation Manual	19
Best Practice Award	19
Steve Nell Scholarship	19
Second Preparatory Diplomatic Conference	20
Fourth Extraordinary Meeting of the Legal Advisory Panel	20
018: A year of 'routine work' as well	22
Council Meetings	22
Council 66	22
Council 67	22
Council 68	23
Policy Advisory Panel (PAP) Meetings	24



PAP 35	24
PAP 36	25
The Committees and Technical Activities	26
Implementation Of The New Committee Structure For 2018-2022	26
Committee Arrangements for the Work Period 2018-2022	26
Progress Reports From The Committees	28
Aids to Navigation Requirements and Management (ARM) Committee	28
Aids to Navigation Engineering and Sustainability (ENG) Committee	28
Vessel Traffic Services (VTS) Committee	28
e-Navigation, Information Services and Communications	28
(ENAV) Committee	20
New or revised guidance documents developed by the Committees	29
World-Wide Academy	30
Financial Results	30
Members	32
Membership Categories	32
New Members	32
Discontinued Memberships	33
Industrial Members Committee (IMC)	35
Cooperation with other International Bodies	36
Governance arrangements	36
General Assembly	36
Council	37
Finance and Audit Committee	37
Policy Advisory Panel	37
Legal Advisory Panel	37
Administrative arrangements	38
Auditor and Chartered Accountant	38
Secretariat	39

ABOUT IALA

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 on achieving the goals of a Strategic Vision by 2026.

A MESSAGE FROM THE PRESIDENT E SECRETARY-GENERAL

The Annual Report for 2018 highlights an exceptional year for IALA and the continued 'success story' that is the World-Wide Academy.

The global reach of the Association's membership remains a huge strength, and 2018 once again set a record in terms of 25 new members joining, and this increase resulted in the total for each membership category consisting of, respectively, 85 National members, 148 Industrial members and 63 Associate members at the end of the year. IALA also has 40 Honorary members.

Significantly, the Academy's activities generate inquiries and new membership applications from developing countries aspiring to achieve accepted international standards in the maritime domain. Africa is the new region where interest in IALA's harmonization work and demand for capacity building and training are noticeably on the increase.

The quadrennial IALA Conference, the 19th, also set a new record - in the number of both participants attending from 65 countries and topics covered. Held in Incheon, Republic of Korea in May and June 2018, the conference had as its theme «A New Era for Marine Aids to Navigation in a Connected World», which extended to two new technical sessions on industry innovation and best practice, respectively. Conservation of historic lighthouses' heritage and their sustainable management also featured prominently - in a special conference forum and, thanks to the unique initiative of the Korean Ministry of Oceans and Fisheries, in the first-ever World Lighthouse Heritage Exhibition. The Incheon Declaration on Lighthouses as Cultural Heritage is an important legacy of the Conference which will hopefully inspire future generations. The launch of the new edition of the Conservation Manual, renamed Complementary Lighthouse Use Manual, was another Incheon highlight.

We commend the Committees for having successfully completed their demanding technical work programmes for the period 2014-2018, resulting in the Council's approval of a wide range of new



and revised Recommendations, Guidelines and Model Courses. The mammoth task of updating the NAVGUIDE - the 'bible' on marine aids to navigation design and operation - was also completed in 2018. The eagerly awaited publication of the 2018 Edition is available free of charge in digital format from the website (https://www.iala-aism.org/guidance-publications/).

The new structure agreed by the Council for the four Committees took effect in the latter half of 2018. The changes are designed mainly to streamline workload in line with the new work programme running to 2022, while also reflecting the growing importance of digital connectivity and the related need for harmonized maritime information services.

The introduction of a first set of seven IALA Standards covering technologies and services marked a significant milestone in the realisation of the Strategic Vision's Goal for 2026 that all coastal States will contribute to an efficient global network of harmonized marine aids to navigation and services for the safety of navigation. Approved by the General Assembly, at its 13th session held in Incheon in May 2018, the Standards are the result of several years of painstaking work by all four Committees and provide high-level references to the principal technical domains covered by IALA Recommendations and Guidelines. Coastal States are expected to implement them, as appropriate, proportionate to their particular needs. The World-Wide Academy stands ready to provide information and advice. The longer-term challenge will be to ensure that implementation efforts are sustainable into the future. Expanding the establishment of IALA accredited training organizations in key regions around the world will therefore continue to be a high priority, as will be the creation of more opportunities for distance learning with the aid of digital platforms.

Progress towards the Association's planned transition to an Intergovernmental Organization has continued apace. The second preparatory diplomatic conference, held in Marrakesh in February 2018, commenced fruitful multilateral negotiations on the detail of the draft text of the new Convention that will govern the IGO, when established. The outcome and subsequent submissions by National members and Governments enabled the preparation of a new, consolidated draft text for finalization at the third preparatory diplomatic conference, held in Istanbul in March 2019. The draft Convention is therefore considered ready for submission to a Diplomatic Conference, which will be hosted by the Government of Malaysia in Kuala Lumpur in February 2020.

We draw attention to the healthy financial outlook, as detailed in this report. We are indebted to the membership for their regular contributions and to the sponsors, both direct and in-kind, small and large, and to the external donors providing vital funding support to the World-Wide Academy.

We are pleased to present this Annual Report, which highlights many positive results from IALA's technical activities, strategy and policy, budget management, and work with partner international organizations. We are deeply grateful for the enduring loyalty of the membership and the unconditional support of the Council. We also thank the Committee chairs, vice-chairs and working group leaders for their hard work and tremendous spirit of cooperation in freely exchanging information and sharing knowledge and experience. The Committees are the 'power house' of IALA and our greatest asset. Meanwhile, the energetic staff of the small World-Wide Academy team play an invaluable role in spreading awareness about the importance of all this technical work and facilitating its assimilation around the world and we thank them for that.

Our sincere thanks also go to the dedicated staff at our Headquarters in Saint-Germain-en-Laye for tirelessly working to complete the day-to-day business and supporting the Council and Committee meetings. The recruitment of three new, permanent staff members in the last quarter of 2018 has already benefited the day-to-day effectiveness of the Secretariat, strengthened coordination between the Committees, and improved cross-fertilization between the World-Wide Academy's 'field' activities and the technical work of the Committees.

IALA remains in a strong position to continue the energetic pursuit of marine aids to navigation harmonization and thereby meet the needs of mariners for standards of safety at sea which are internationally recognized and accepted. The celebration of World Marine Aids to Navigation Day, on 1st July of each year, as decided by the 13th Assembly, will be an important affirmation of this noble endeavour for many years to come and hopefully enlighten the wider public about the true meaning of our motto «Successful Voyages, Sustainable Planet».



Youngshin KIM PRESIDENT



Francis ZACHARIAE SECRETARY-GENERAL

MESSAGE DE LA PRÉSIDENTE ET DU SECRÉTAIRE GÉNÉRAL

Ce Rapport Annuel pour l'année 2018 montre une année exceptionnelle pour l'AISM et démontre une fois encore le succès de l'Académie mondiale.

La couverture mondiale de l'AISM, par le biais de ses membres, reste très forte et 2018 établit encore une fois un record dans le nombre des nouvelles adhésions. Ceux-ci se répartissent en 85 membres nationaux, 147 membres industriels et 63 membres associés. L'AISM compte en outre 40 membres honoraires. Les activités de l'Académie sont à l'origine de nombreuses demandes d'informations et génèrent des demandes d'adhésion de la part de pays en développement, aspirant à atteindre les normes internationales du domaine maritime. L'Afrique est la région où l'intérêt dans les travaux d'harmonisation de l'AISM et la demande en formation et en renforcement des capacités augmentent de façon significative.

La 19ème Conférence quadriennale a, elle aussi, établit un nouveau record - dans le nombre des participants qui représentaient 65 pays, et le nombre de sujets couverts. Tenue en mai et juin 2018 à Incheon, en République de Corée, son thème « Une nouvelle ère pour des aides à la navigation maritime dans un monde connecté » s'est étendu à deux nouvelles sessions techniques, sur l'innovation industrielle et sur les meilleures pratiques. La sauvegarde du patrimoine des phares historiques et leur gestion durable ont tenu le rôle de vedettes au cours d'un forum spécial de la Conférence et au sein de la toute première exposition mondiale sur le patrimoine des phares. Celle-ci était organisée à la seule initiative du Ministère coréen des océans et des pêches. La Déclaration d'Incheon sur les phares en tant que patrimoine culturel est un héritage important qui, on l'espère, inspirera les générations futures. Le lancement de la nouvelle édition du Manuel de sauvegarde des phares, renommé « Manuel pour l'utilisation complémentaire des phares », était un autre évènement de la Conférence.

Nous félicitons les Commissions pour avoir mené à bien, avec succès, l'exigeant programme de travail de la période 2014-2018, qui a abouti à l'approbation par le Conseil d'un large éventail de recommandations, de guides et de modèles de cours, nouveaux ou révisés. La tâche gigantesque de mise à jour du NAVGUIDE - «bible» pour la conception et le fonctionnement des aides à la navigation maritime - a également été achevée en 2018. L'édition 2018 tant attendue est disponible gratuitement en format numérique sur le site Web (https://www.iala-aism.org/guidancepublications/).

La nouvelle structure décidée par le Conseil pour les quatre Commissions a pris effet au cours du dernier semestre 2018. Les changements visent principalement à répartir la charge du nouveau programme de travail qui s'étend jusqu'à 2022, tout en reflétant l'importance croissante de la connectivité numérique et le besoin en services harmonisés d'informations maritimes qui y est associé.

L'arrivée d'une première série de sept normes AISM, couvrant technologies et services, a représenté une étape importante dans la réalisation du but de la Vision stratégique qui consiste en ce que tous les Etats côtiers contribuent, pour la sécurité de la navigation, à un réseau mondial efficace d'aides à la navigation maritime et de services harmonisés. Approuvées par l'Assemblée générale lors de sa 13ème session à Incheon en mai 2018, les normes sont le résultat de plusieurs années d'un travail méticuleux mené par les quatre Commissions, et fournissent des références de haut niveau aux principaux domaines techniques couverts par les recommandations et les guides de l'AISM. On attend des Etats côtiers qu'ils les mettent en œuvre, en fonction de leurs besoins spécifiques. L'Académie mondiale se tient prête à fournir informations et conseils. Le défi à long terme sera de s'assurer que les efforts de mise en œuvre sont pérennes. L'accroissement du nombre d'organismes de formation accrédités dans les régions-clés du monde reste donc une première priorité, de même que la création de plus d'opportunités d'apprentissage à distance à l'aide de plates-formes numériques.

Les progrès réalisés dans le sens de la transition de l'Association vers une Organisation Intergouvernementale (OIG) continuent de façon soutenue. La deuxième conférence diplomatique préparatoire, tenue à Marrakech en février 2018, a permis d'engager avec succès des négociations plurilatérales sur le projet de texte de la nouvelle Convention qui gouvernera l'OIG, lorsque celle-ci sera créée. Ses résultats, et les soumissions ultérieures des membres nationaux et des



gouvernements, ont permis l'élaboration d'un nouveau projet de texte à finaliser à la troisième conférence diplomatique préparatoire, qui a eu lieu à Istanbul en mars 2019. Le projet de Convention sera présenté à une Conférence diplomatique, qui sera accueillie par le gouvernement de la Malaisie à Kuala Lumpur en février 2020.

Nous attirons l'attention sur nos perspectives financières saines, telles que détaillées dans le présent rapport. Nous sommes redevables à nos membres pour leur régularité dans le paiement de leurs contributions, ainsi qu'à nos sponsors, qu'ils contribuent financièrement ou en nature, et aux donateurs qui fournissent à l'Académie mondiale un soutien financier vital.

Nous sommes heureux de vous présenter ce Rapport Annuel, qui met en évidence de nombreux résultats positifs issus de nos activités techniques, de nos stratégies et politiques, de notre gestion budgétaire et de notre travail avec les organisations internationales partenaires. Nous sommes profondément reconnaissants à nos membres pour leur loyauté sans faille, et au Conseil pour son soutien inconditionnel. Nous remercions également les présidents, vice-présidents et chefs de groupes de travail des Commissions pour leur travail acharné et l'esprit de coopération dont ils font preuve en échangeant librement connaissances et expérience. Les Commissions sont la «salle des machines» de l'AISM, et notre plus grand atout. Entre-temps, le personnel dynamique de la petite équipe de l'Académie mondiale joue un rôle inestimable dans la sensibilisation à l'importance de tout ce travail technique et facilite son assimilation dans le monde entier. Nous les en remercions.

Nos remerciements sincères vont aussi à l'équipe dévouée du siège, à Saint-Germain-en-Laye, pour son travail inlassable dans l'accomplissement des tâches quotidiennes et l'aide qu'elle apporte aux réunions du Conseil et des Commissions, avec des participants de plus en plus nombreux. Le recrutement de trois nouveaux salariés permanents au cours du dernier trimestre de 2018 a déjà bénéficié à l'efficacité du Secrétariat, renforcé la coordination entre les Commissions, et enrichi les échanges entre les activités de l'Académie mondiale et les travaux techniques des Commissions. L'AISM est en position de force dans sa poursuite des travaux d'harmonisation des aides à la navigation maritime et répond aux besoins de normes de sécurité maritime internationales exprimés par les marins. La célébration à venir de la Journée mondiale des aides à la navigation maritime, le 1er juillet de chaque année, telle que décidée par la 13ème Assemblée générale, constituera une affirmation importante de cette noble entreprise et éclairera le grand public sur le sens véritable de notre devise "Voyages réussis, planète durable".



Youngshin KIM PRESIDENT



Francis ZACHARIAE SECRETARY-GENERAL

2018: AN EXCEPTIONAL YEAR

KEY IALA ACTIVITIES AND EVENTS

The year under review marked the end of the four-year work programme 2014-2018 and the convening of the quadrennial General Assembly and Conference, both held in May and June in Incheon, Republic of Korea. A 'snapshot' of key activities and events conducted by IALA and the World-Wide Academy is provided in the table below. Further details of many of the listed activities and events are contained elsewhere in this report.

Month	IALA	World-Wide Academy
	✓ ENAV Intersessional meeting, Germany	✓ L1.1 AtoN Manager distance learning course, worldwide launch ✓ L1.1 AtoN Manager distance ✓ L1.1 AtoN Manager distanc
January	✓ e-Navigation Underway International Conference,	✓ SIRA course, IALA Headquarters
	Denmark	✓ High-Level meeting, Bahrain
		✓ WWA seminar on the Awareness of Safety of Navigation in Africa, Morocco
February	 ✓ 2nd Preparatory Diplomatic Conference, Morocco ✓ Policy Advisory Panel (PAP), 35th session, IALA Headquarters 	✓ Needs Assessment Review, Mauritius
		✓ Risk Management training seminar, South Africa
		✓ Needs Assessment Mission, Tuvalu
		✓ L1.1 AtoN Manager course, South Africa
March		✓ L1.1 AtoN Manager course, Malaysia
		✓ Needs Assessment Mission, Timor-Leste
		✓ Meeting with Asia-Pacific Heads of Maritime Safety Agencies, Chile
April	✓ VTS Intersessional meeting, IALA Headquarters	✓ L1.1 AtoN Manager course / Module 3, IALA Headquarters
	IALA Headquarters	✓ L1.1 AtoN Manager course, Ecuador
		✓ Needs Assessment Review, Sudan



	✓ Council 66, Republic of Korea		
	✓ 19 th Conference, Republic of Korea	✓ WWA Pre-Conference Forum on "The Quality of Maritime Management", Republic of Korea	
May	✓ 13 th General Assembly,		
	Republic of Korea		
	✓ Council 67, Republic of Korea		
	✓ 19 th Conference, Republic of Korea	✓ Needs Assessment Mission,	
June	✓ e-Navigation Underway Asia-	Mozambique ✓ SIRA workshop, Fiji	
	Pacific Conference, Republic of Korea		
July	✓ ENAV Intersessional meeting,	✓ Visiting professor at World Maritime University, Sweden	
July	People's Republic of China	✓ L1.1 AtoN Manager course, India	
A			
August			
		✓ High Level meeting, Saudi Arabia	
September		Joint Capacity Building meeting, U.K.	
	✓ PAP 36, IALA Headquarters	✓ IMO-IALA coordination meeting, IALA Headquarters	
		✓ Needs Assessment Review, Georgia	
		✓ L1.1 AtoN Manager course, France	
		✓ Needs Assessment Mission,	
	✓ VTS 45, IALA Headquarters	Angola	
	✓ V15 45, IALA Headquarters✓ ENAV 22, IALA Headquarters	✔ IWRAP Risk seminar, Japan	
October	✓ ENAV 22, IALA Headquarters ✓ ENG 8, IALA Headquarters	✔ L1.1 AtoN Manager course, China	
	✓ ENG 8, IALA Headquarters ✓ ARM 8, IALA Headquarters	✓ Needs Assessment Review, Togo	
November	✓ ARIVI o, IALA Headquarters ✓ e-Navigation Underway North		
	America Conference, USA	✓ L1.1 AtoN Manager course /	
	 ✓ Legal Advisory Panel (LAP), 4th Extraordinary Session, IALA Headquarters 	Module 3, IALA Headquarters	
December		✓ Master of AtoN Manager course, IALA Headquarters	
	✓ Council 68, IALA Headquarters	 ✓ Accredited Training Organisations seminar, IALA Headquarters 	

13TH GENERAL ASSEMBLY

The 13th General Assembly was held on 29 May 2018, on the occasion of the 19th Conference held in Incheon, Republic of Korea. A record number of 55 National members were in attendance. Most Industrial and Associate members participating in the Conference also attended.

This was the first time that the General Assembly conducted its business during one single session, which was due to the implementation of new rules adopted by the Council under the General Regulations in June 2016, as part of a first step towards IALA's planned change of status to an Intergovernmental Organization (IGO). Consequently, all National members had been invited to nominate their candidates for the Council election well in advance and all documents submitted by the Council for approval by the General Assembly had been made available to the membership two months in advance of the meeting. This enabled the General Assembly to work through its busy agenda in a more effective and speedy way.

The meeting was chaired by Mr Juan Francisco Rebollo of Spain, President of IALA for the period 2014-2018. Its main outcomes are briefly listed below.

Report on IALA Activities and Finance

The Secretary-General reported on the main activities at IALA since the 12th General Assembly held in A Coruña, Spain in 2014. He focused on the growing membership, the numerous guidance documents prepared by the Committees and approved by the Council, the recent refurbishment of the IALA Headquarters including new IT, conferencing and video facilities, and the progress made in the change of status project, with two preparatory diplomatic conferences already held in 2016 (Paris) and 2017 (Marrakesh, Morocco).

The Treasurer, Captain Ian McNaught of the United Kingdom, reported on a healthy financial situation and on budget management over the past four years. for the period 2014-2018. Its main outcomes are briefly listed below.

Amendments to the IALA Constitution

The Chair of the Legal Advisory Panel (LAP) of the Council, Mr Jon Price of the United Kingdom, presented the proposed amendments to the IALA Constitution. The changes mainly reflected a wording that is common to IGOs, provided for a vote by correspondence - via electronic means - at the General Assembly, and introduced a more specific definition of the term «marine aid to navigation».

The General Assembly approved the proposed amendments to the Constitution and adopted an Assembly Resolution to that effect (Resolution A13-01 of 29 May 2018).

Approval of the Strategic Vision 2018-2026

The Chair of the Strategy Drafting Group of the Council, Mr Christian Forst of Germany, reported that the Strategic Vision for 2018-2026 that was approved by the 12th General



Assembly held in A Coruña, Spain in 2014 had guided the work of the Committees and the World-Wide Academy over the past four years. It had enabled IALA to focus its activities in the four- year period 2014-2018 on achieving the two Goals set out in the Strategic Vision by 2026.

The revised Strategic Vision approved by the Council in December 2017 remained very similar to the original text but now included an explicit reference to sustainability in Goal 2 (now stating 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). In addition, a change was made to Strategy 3 (Coordinate the further development of marine aids to navigation, taking into account new techniques, new technologies and sustainability), which now also takes into account "evolving operational and functional requirements".

The General Assembly approved the revised Strategic Vision for 2018-2026 and adopted an Assembly Resolution to that effect (**Resolution A13-02** of 29 May 2018).

STRATEGIC VISION FOR 2018-2026

The revised Strategic Vision approved by the 13th General Assembly in May 2018 covers the period from 2018 to 2026 and establishes two Goals, which IALA should aim to achieve by the end of 2026. It also contains a set of eight Strategies to facilitate their achievement.

The two Goals for 2026 are:

Goal 1 - Marine Aids to Navigation are developed and harmonized through international cooperation and the provision of standards.

Goal 2 - 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.

A more detailed, technical document complements the high-level Strategic Vision and sets out IALA's "Position on the Development of Marine Aids to Navigation Services" for the shorter term. First approved by the Council in December 2017, it is kept under regular review by the Policy Advisory Panel with input from the Committees and amended as necessary. It analyses current trends and drivers of strategy, and sets out a series of technical position statements, each of which is concerned with a specific aspect of IALA's

technical work. This set of position statements provides a clear link from the Strategic Vision to the distinct work programmes of the individual Committees.

The technical strategy of IALA, longer term and shorter term, is therefore defined by two principal strategy documents:

- the Strategic Vision 2018-2026; and
- the Position on the Development of Marine Aids to Navigation Services.

These two documents may be accessed here: https://www.iala-aism.org/about-iala/strategy-definition/.

The Committees additionally maintain other documents that support the Strategic Vision, including the Marine Radio Communications Plan, which was updated in 2017.

Approval of IALA Standards

The Deputy Secretary-General, Mr Michael Card, presented the proposed seven IALA Standards, as follows:

- Standard 1010 Aids to Navigation Planning and Service Requirements
- ✓ Standard 1020 Aids to Navigation Design and Delivery
- Standard 1030 Radionavigation Services
- Standard 1040 Vessel Traffic Services
- Standard 1050 Training and Certification
- Standard 1060 Digital Communication Technologies
- ✓ Standard 1070 Information Services

He explained that IALA Standards were provided for in the IALA Constitution, as amended in 2014, and are stated in the Strategic Vision. The proposed Standards, which cover technology and services, form a high-level framework providing a clear structure for referencing the technical guidance documents developed by the Committees.

The General Assembly approved the seven IALA Standards and adopted an Assembly Resolution to that effect (**Resolution A13-03** of 29 May 2018).

IALA STANDARDS

The 13th General Assembly held in Incheon, Republic of Korea in May 2018 approved a suite of seven IALA Standards designed to provide a robust structure for the extensive technical guidance documentation (Recommendations, Guidelines and Model Courses) developed by IALA.

The Standards are not mandatory in any legal sense. Nonetheless, their effective implementation by a provider of marine aids to navigation in a coastal State will serve to further improve upon the harmonization of marine aids to navigation around the world. As such, they are a vital aspect of the Strategic Vision that all coastal States contribute to a globally harmonized network of marine aids to navigation by 2026.

A coastal State wishing to claim compliance with a particular Standard will be expected to fully observe the normative provisions within that Standard. Effective implementation of the Standard will provide a clear and evidence-backed commitment and also demonstrate the coastal State's fulfilment of its legal obligations under the International Convention for the Safety Of Life At Sea (SOLAS Convention) concerning the provision of marine aids to navigation and Vessel Traffic Services.

To raise awareness of the IALA Standards and promote understanding of their normative and informative provisions and what is required to achieve effective implementation, a seminar took place in Istanbul on 11 March 2019, with the support of the Directorate General for Coastal Safety of Turkey. It was scheduled in conjunction with the third preparatory diplomatic conference (12-14 March 2019) to consider the draft text of the IALA Convention that will govern IALA as an Intergovernmental Organization, when established. Its aim was to provide information and advice and explain the support available from the IALA World-Wide Academy and the international initiatives being developed to assist coastal States with the effective implementation of the Standards, as appropriate and proportionate to their needs. It also included practical presentations on commonly encountered issues and case studies on how coastal States have achieved compliance with IALA Recommendations identified as normative provisions.

IALA continues to promote the Standards actively through the work of the Secretariat as well as by highlighting the work of IALA members in their day-to-day activities.

A range of graphics has been created to provide a visual identity for each of the seven Standards. They can be accessed here: https://www.iala-aism.org/product-category/publications/ standards/



Establishment of an Annual World Marine Aids To Navigation Day

Mr Juan Francisco Rebollo of Spain, President of IALA for the period 2014-2018, introduced the proposal to establish an annual World Marine Aids to Navigation Day, on 1st July of each year, the date on which IALA was established in 1957. The proposal was positively received and it was felt that all members should be encouraged to celebrate this Day in their respective countries on or as close as possible to 1st July.

The General Assembly agreed to the establishment of an annual World Marine Aids to Navigation Day and adopted an Assembly Resolution to that effect (**Resolution A13-03** of 29 May 2018).

WORLD MARINE AIDS TO NAVIGATION DAY

The 13th General Assembly held in Incheon, Republic of Korea on 29 May 2018 decided to establish a World Marine Aids to Navigation (WAtoN) Day on 1st July of each year to showcase marine aids to navigation, with two principal objectives:

- ✓ To promote greater awareness of IALA by bringing to the attention of the wider public the role of IALA and the significance of its technical work in enhancing the safety of navigation worldwide.
- ✓ To improve society's perception of marine aids to navigation as modern, technologically advanced aids, which, alongside traditional lighthouses, embrace the latest digital developments and support new developments, including Vessel Traffic Services.

Each country is invited to celebrate the yearly WAtoN Day and organize events as it sees fit.

In order to choose a theme for the inaugural WAtoN Day all IALA Members were invited to submit proposals by 1 November 2018. Taking account of received submissions, the Council unanimously supported a broad theme: "Marine Aids to Navigation - Successful Voyages, Sustainable Planet".

It was felt that the theme served as a suitable umbrella encompassing the range of proposed suggestions and also accommodated the technical domains of all four IALA Committees. The use of IALA's motto "Successful Voyages, Sustainable Planet" would also reinforce the Association's mission to promote the global harmonization of marine aids to navigation standards, the safety and efficiency of navigation and the protection of the environment.

Also, more familiar marine aids to navigation, such as the Maritime Buoyage System, could serve as a gateway to highlight to the wider public the important role they currently play in society and the latest developments. The maritime community is well placed to engage with widening awareness by using its direct experience with established and future marine aids to navigation.

It is the intention to propose a different theme for WAtoN Day every year, subject to approval by the Council, although the original theme may also be reused in future years.



General Assembly Resolutions

All decisions taken by the General Assembly are the subject of a distinct Resolution. All General Assembly Resolutions are posted under "Meeting documents/Other publications" on the IALA website. The four Resolutions adopted by the 13th General Assembly may be accessed here: https://www.iala-aism.org/product-category/ publications/other-publications/.

Council Election

The Secretary-General reminded the participants that there were three permanent seats on the Council, as follows:

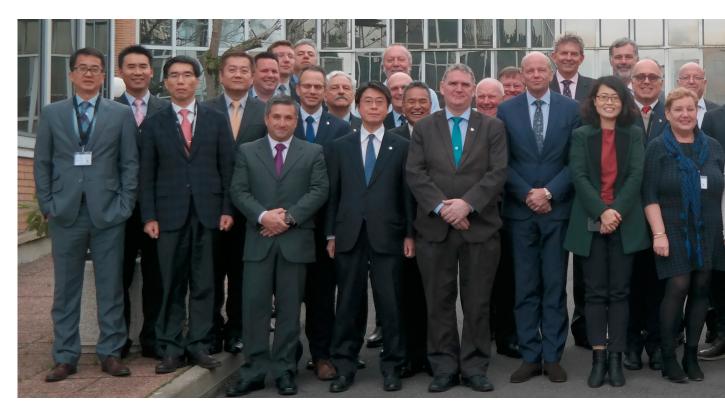
- the National member having hosted the last Conference;
- the National member hosting the next Conference; and
 a National member of IALA's host country (France).

He then announced that 26 nominations had been received for the 21 seats to be filled by ballot.

Following the President's nomination of the required two scrutineers, the heads of delegation of all National members present were invited to complete their ballot form and bring it to the ballot box. The count executed by the Secretariat under the supervision of the two scrutineers resulted in votes for the last seat being divided equally between two candidates; a second ballot was therefore held with only these two candidates listed on the ballot form. This second ballot resulted in a majority in favour of one of the candidates, enabling the President to confirm the Council for the period 2018-2022 as comprising the following members:

Non-elected members:

Ministry of Oceans and Fisheries, Republic of Korea





- Centro de Sinalização Náutica "Almirante Moraes Rego", Brazil
- Direction des Affaires Maritimes, France

Elected members:

- Australian Maritime Safety Authority
- Canadian Coast Guard
- Directorate General of the Maritime Territory and Merchant Marine (Directemar), Chile
- Danish Maritime Authority
- Finnish Transport AgencyWasser- und Schifffahrtsdirektionen, Germany
- Directorate General of Lighthouses and Lightships, India
- Italian Coast Guard
- Japan Coast Guard
- ✓ Light Dues Board, Peninsular Malaysia
- → Direction des Ports et du Domaine Public Maritime, Morocco
- Norwegian Coastal Directorate
- ✓ Maritime Safety Administration, People's Republic of China
- Maritime and Port Authority, Singapore
- Transnet National Port Authority, South Africa
- ✓ Puertos del Estado, Spain
- Swedish Maritime Administration
- ✓ Ministry of Infrastructure and the Environment, Directorate of Maritime Affairs, The Netherlands
- Directorate General of Coastal Safety, Turkey
- Trinity House, United KingdomUnited States Coast Guard

While votes were being counted, the National members of The Netherlands and Brazil took the opportunity to make brief statements inviting delegates to, respectively, the combined VTS-ENAV Symposium in Rotterdam in 2020 and the 20th IALA Conference in Rio de Janeiro in 2022.



19TH CONFERENCE

Main Business of the Conference

More than 500 delegates from 65 countries attended the 19th Conference, which was hosted by the Ministry of Oceans and Fisheries of the Republic of Korea with outstanding effectiveness at the Songdo ConvensiA in Incheon, from Monday 28 May to Saturday 2 June 2018. The chosen theme for the Conference was "A New Era for Marine Aids to Navigation in a Connected World". A host of dignitaries and maritime community stakeholders welcomed participants and the Secretary-General of the International Maritime Organization (IMO), Mr Kitack Lim, delivered the keynote address.

During four days Conference participants heard a total of 94 **technical presentations**, spread over 13 technical sessions. In addition, the Conference featured, for the first time, a "Best Practice" session and an "Industry Innovation" session, both of which were a great success.

There was also plenty of opportunity for all participants to view and discuss the latest developments in marine aids to navigation technology and Vessel Traffic Services systems in the large **industrial exhibition**, where a record number of Industrial members exhibited.

Historic lighthouse heritage conservation and sustainable management featured prominently in a special Conference forum and, thanks to the unique initiative of the Korean Ministry of Oceans and Fisheries, in the first-ever **World Lighthouse Heritage Exhibition**. The associated Incheon Declaration is an important legacy of the Conference which will hopefully inspire future generations to maintain and conserve lighthouses as multi-faceted cultural heritage.

Summary of Technical Sessions

The Conference had a strong focus on the development and exchange of **maritime digital information** to improve the safety and efficiency of maritime transport.

It heard that the use of **Maritime Resource Names** (.mrn) will be needed for the development of globally harmonized data models to enable implementation of digital maritime services. These are an important element of the IMO's e-Navigation Strategic Implementation Plan and IALA continues to make a major contribution to the shore-based aspects of this e-navigation work.

The evolution of the existing Automatic Identification System (AIS) into the VHF-based Data Exchange System (VDES) - to accommodate the fast-growing demand for the robust transfer of ever-larger volumes of data - was highlighted by a number of presenters as important for secure and reliable digital communications, together with other, commercial satellite and terrestrial communications services. There were also presentations on the practical use of existing, public terrestrial systems for providing safety information to fishing vessels and leisure craft.

Cyber security risks in data transfer will continue to grow, and cyber security precautions will remain vital.

Shore authorities from Europe explained how they share AIS data to support **maritime domain awareness**, and how they are developing **traffic management** concepts to improve transport chain efficiency.

Effective and unambiguous **Vessel Traffic Services communications** will require common phraseology, procedures and technology for voice communications, and harmonized data models and communications channels for digital information exchange. Revision of IMO



Resolution A.857(20) concerning Guidelines for Vessel Traffic Services will be necessary for this harmonization and for a common, global understanding and implementation of modern Vessel Traffic Services. The revision is included in the IMO's work programme for 2020-2021 and IALA's input will be critical to ensure its success.

In the sessions on **Positioning, Navigation and Timing** (PNT) the importance of resilience was underscored. Resilient PNT is vital for electronic navigation and underpins a variety of safety-related services. A mix of dissimilar systems is required to achieve resilient PNT and candidate technologies were explored. Autonomous vessels entering service now and in future will need assured positioning and automatic compensation for Global Navigation Satellite System (GNSS) outages or disruption. Electronic systems such as SBAS (Satellite-Based Augmentation System), R-Mode, Radar positioning and eLoran are likely to be used to help achieve the necessary resilience, but there is still no global consensus on a coordinated approach for the maritime world.

The growing use of **risk assessment** by shore authorities to aid safe navigation was noted. While there is no single 'one size fits all' tool, IALA's risk management tool box has a set of proven, widely used assessment programs. If used correctly, they can greatly assist marine aids to navigation authorities to evaluate risk and help coastal States to meet their international obligations.

Traditional, **visual aids to navigation signalling** remains essential in waterways. Increasingly, they are being supplemented by virtual electronic aids, both for navigation and for response to emergencies or disasters. The Conference heard of recent changes to Recommendations for visual aids to navigation, and of technical developments for practical installation, operation and maintenance. These conclusions were supported by results of user consultation.

In the **Best Practice** session, many examples of aids to navigation and Vessel Traffic Service provisions were presented and all presentations and associated papers were of outstanding quality and very informative. They certainly can serve as best practices for other aids to navigation and Vessel Traffic Service authorities and manufacturers.

Other Conference Features

World Lighthouse Heritage Exhibition

Assisted by many members contributing display material and artefacts, an extensive exhibition of lighthouse heritage supplemented the technical sessions and the industrial exhibition, tracing the development of lighthouses around the world and illustrating lighthouse life. Associated with this first-ever world exhibition was a wonderful display of award-winning paintings resulting from a national competition involving youngsters from schools across Korea.

In addition to the exhibition, a special Conference forum addressed the preservation and complementary uses of historic lighthouses and their real estate. Presentations explored the cultural, technological, architectural and social-economic benefits gained from an active heritage programme.

Incheon Declaration on Lighthouses as Cultural Heritage

The Incheon Declaration on Lighthouses as Cultural Heritage had been drafted on the initiative of the Korean Ministry of Oceans and Fisheries. It was formally declared during the closing day proceedings of the Conference and aims to inspire all members to raise awareness among the wider public and to support international cooperation for the conservation of the cultural heritage of lighthouses and the effective implementation of sustainable lighthouse management.

INCHEON DECLARATION ON LIGHTHOUSES AS CULTURAL HERITAGE

Under the IALA motto 'Successful voyages, Sustainable planet' the Ministry of Oceans and Fisheries (MOF) of the Republic of Korea and the International Association for Marine Aids to Navigation and Lighthouse Authorities (IALA) gathered at the 19th IALA Conference, held in Incheon, Republic of Korea, from 28 May to 2 June 2018;

Considering the objectives embodied in the conference theme 'A new era for Marine Aids to Navigation in a connected world';

Recalling the principles put forward in the Convention concerning the Protection of the World Cultural and Natural Heritage (1972), the ASEAN Declaration on Cultural Heritage (2002), the Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas (2005), and the Florence Declaration on Heritage and Landscape as Human Values (2014);

Noting the relevant provisions in the United Nations Convention on the Law of the Sea, the United Nations Framework Convention on Climate Change, the United Nations Sustainable Development Goals, the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities, and other important multilateral conventions, agreements, and action plans related to the maritime community and environment;

Emphasizing that historical lighthouses are a unique and important symbol of a globally shared maritime heritage and hold great significance to local and national communities as well as being a clear demonstration of an effective global collaboration of the best contemporary material and technological sciences;

Understanding that the cultural heritage of lighthouses is a meaningful legacy that exists today and that is passed on to future generations; this cultural heritage includes but is not limited to navigational, technological, material, industrial, social, environmental, architectural, maritime and local aspects and lends itself to education and wider cultural and commercial activities;

Noting the vital role of lighthouses in the safe navigation of shipping over the centuries and its value to the seafarers and others as a symbol of hope and safety;

Considering a vision for the conservation and sustainable management of historical lighthouses as cultural heritage;

Declare the following:

IALA members are encouraged to:

1. Raise awareness of the need for the conservation and sustainable management of

historical lighthouses as cultural heritage;

2. Recognize that the significance of historical lighthouses extends beyond the navigational and architectural value to include maritime culture and history, social history, environmental aspects and that there is great value in documenting, researching and interpreting these for the benefit and inspiration of future generations;

3. Conserve and develop historical lighthouse sites and associated maritime cultural

spaces in order that people of all ages and backgrounds can appreciate and enjoy their

respective nations' maritime contribution and culture;
4. Support IALA's efforts to further sustainable lighthouse management through knowledge sharing, training and international cooperation projects; which will strengthen the capacity of coastal nations to manage their lighthouses in a coordinated manner and will encourage good conservation practices and foster interest in lighthouse heritage globally;

5. Note the launch of the Incheon Project designed for IALA and its members to provide assistance for developing nations through education, training, technology transfer and capacity building as well as contributing to the advancement of global aids to navigation by means of various programmes and management in an efficient and coordinated manner as an important legacy of the 19th IALA Conference in Incheon, Korea in 2018.





IALA Conservation Manual

A new edition of the Conservation Manual was published and the Manual was renamed the Complementary Lighthouse Use Manual. Its launch was very appropriate in the context of the World Lighthouse Heritage Exhibition and the associated Incheon Declaration.

Best Practice Award

The presentation of the inaugural Best Practice Award was a new initiative. The first prize went to Mr David Lewald of the United States Coast Guard for his first-hand account on the critical use of AIS-based aids to navigation and lessons learned in disaster preparation and response during the 2017 hurricane season. (Hurricanes Harvey, Irma and Maria caused widespread death and unprecedented destruction in Florida, Texas, Puerto Rico and the US Virgin Islands.)

The second prize went to Mr Raul Escalante of Hidrovia SA, Argentina. His presentation highlighted the painstaking development work and the technical, economical and environmentally friendly implementation efforts undertaken to secure practical solutions to a very real and chronic problem - birds' accumulated excrements (Guano) smothering aids to navigation.

Steve Nell Scholarship

The General Assembly of the Industrial members, also held in conjunction with the 19th Conference, approved the establishment of an annual scholarship in recognition of the deep involvement of Mr Steve Nell in the activities of IALA and his dedication to the Industrial Members Committee. Mr Nell passed away in October 2017 and every year the scholarship in his name will provide funding for the World-Wide Academy to support African students.

SECOND PREPARATORY DIPLOMATIC CONFERENCE

At the kind invitation of the Minister of Equipment, Transport, Logistics and Water of the Kingdom of Morocco, a second preparatory diplomatic conference took place in Marrakesh on 7 and 8 February 2018 to further progress the process needed to achieve IALA's planned change of status to that of an IGO. A first conference had been held in Paris on 17 and 18 April 2017, with the support of IALA's host nation and under the chairmanship of His Excellency, Mr Serge Ségura, French Ambassador for the Oceans.

The second preparatory diplomatic conference was once again chaired by Mr Ségura, with the support of Mr Lahcen Ait Brahim, Director of Ports and Maritime Public Domain of Morocco. The conference considered the revised draft IALA Convention text, taking account of comments from National members and Governments and the work done by the Legal Advisory Panel of the Council as a follow-up to the Paris conference and the road map agreed in Paris.

The attendance was similar to the Paris conference, with participation by 147 delegates representing 50 countries from around the world and three international organizations. Six of the countries represented had not yet joined IALA as National members. The conference concentrated on the first 11 articles of the draft Convention text and reached agreement on some aspects of the Convention text.

As regards the draft General Regulations, it was agreed that further work on these would be done once the text of the draft Convention had been agreed. Also, the General Regulations would not be the subject of a drafting session at the Diplomatic Conference, when it takes place, but would be approved by the first General Assembly of the new Organization (i.e. when IALA is effectively established as an Intergovernmental Organization).

The conference agreed that a revised Convention text - taking into account the comments from the delegations - would be consolidated by the Secretariat. National members and governmental Points of Contact would then be invited to submit comments on the consolidated text to the Secretary-General not later than 30 September 2018. The comments thus received were considered at a fourth extraordinary meeting of the Legal Advisory Panel held at the IALA Headquarters in Saint-Germain-en-Laye in November 2018.





FOURTH EXTRAORDINARY MEETING OF THE LEGAL ADVISORY PANEL (LAPEX4)

The fourth extraordinary meeting of the Legal Advisory Panel (LAP) brought together National members in order to conduct further work on the draft Convention text and took place at the IALA Headquarters on 21 and 22 November 2018. The meeting was chaired by Ms Christina Schneider of the Federal Waterways and Shipping Authority of Germany, with the support of the Vice-Chair, Mr Henning Teigene Osnes of the Coastal Administration of Norway. Ms Schneider took over as LAP Chair following the retirement of Mr Jon Price of the United Kingdom (Trinity House).

The draft Convention text had been revised by the LAP Chair, the Vice-Chair and the IALA Secretariat prior to the meeting to reflect comments received from National members and governments, following the second preparatory diplomatic conference held in Marrakesh in February 2018. The extraordinary LAP meeting proceeded with considering legal issues that may arise from the revised text, commented and further amended the text, and identified matters requiring discussion at diplomatic level.

In line with the decision taken at the second preparatory diplomatic conference, the draft General Regulations were not considered as they will be approved by the first General Assembly of the new Organization, when IALA is effectively established as an Intergovernmental Organization.

The amended Convention text was submitted as an input paper, together with supporting papers, to the third preparatory diplomatic conference held in Istanbul, Turkey from 12 to 14 March 2019.



2018: A YEAR OF 'ROUTINE WORK' AS WELL

COUNCIL MEETINGS

The Council convened three times in 2018. As is usual in General Assembly years, which coincide with the quadrennial Conference, the Council meets twice during the period of the Conference: once to close the work period (in this case 2014-2018) and hear of the latest developments in the work of the Committees, and once after the General Assembly in order to elect the new IALA President and Vice-President from among the Councillors forming the new Council as elected by the General Assembly for the next work period (in this case 2018-2020). Thus, the 66th and 67th Council sessions were held at Incheon's Songdo ConvensiA on, respectively, the day prior to the opening of the 19th Conference and the last day of the Conference.

The third Council meeting of 2018 (68th session) was of a more 'routine' nature and took place at the IALA Headquarters in December.

66th Council Session

The Council held its 66^{th} session during the morning of Sunday 27 May 2018 and was chaired for the last time by Mr Juan Francisco Rebollo of Spain, in his capacity as President for the work period 2014-2018.

It approved the revised budget for 2018, decided the contribution rates for 2019, and approved applications for membership received from one National member, seven Industrial members and two Associate members.

The draft work programmes of the four Committees for the new four-year work period 2018-2022 were reviewed and slightly changed.

The Council also finalised the arrangements for the 13th General Assembly that was to take place two days later, on Tuesday 29 May.

67th Council Session

The Council held its 67th session during the afternoon of Saturday 2 June 2018. As a result of the Council election held at the 13th General Assembly, the Council welcomed three new Councillors, who were the National members for Canada, Morocco and Singapore.

The main task concerned the election of the new IALA President and Vice President for the work period 2018-2022, of the Finance and Audit Committee, and of the Treasurer. The election results were as follows:



President: Ms Youngshin KIM, Republic of Korea;

✓ Vice President: Rear Admiral (Ret.) Marcos de Almeida, Brazil;

▼ Finance and Audit Committee: the Council members from France, Germany, Malaysia, South Africa and the United Kingdom; the Councillor for the United Kingdom, Captain lan McNaught, was re-elected as Chair of the Committee; and

▼ Treasurer: Captain Ian McNaught was also re-elected as IALA Treasurer.

The Council also approved the work programme for the period 2018-2022 and appointed the Committee Chairs and Vice-Chairs, as follows:

ARM Chair Mr Phil Day, Northern Lighthouse Board, United Kingdom;

Vice-Chair Mr David Lewald, United States Coast Guard;

✓ ENG Chair Mr Simon Millyard, Trinity House, United Kingdom; Vice-Chair Mr Michel Cousquer, CEREMA, France;

✓ VTS Chair Ms Monica Sundklev, Swedish Maritime Administration;

Vice-Chair Mr Dirk Eckhoff, Federal Waterways and Shipping Administration,

Germany; and

ENAV Chair Commander Hideki Noguchi, Japan Coast Guard;

Vice-Chair Mr Jorge Arroyo, United States Coast Guard.



Phil Day

ARM

David Lewald



Simon Millyard



Michel Cousquer



Monica Sundklev



Dirk Eckhoff



Hideki Noguchi



Jorge Arroyo

68th Council Session

VTS

The Council held its 68th session at the IALA Headquarters in Saint-Germain-en-Laye from 11 to 14 December 2018. Ms Young-shin Kim, the newly elected IALA President, chaired the meeting. The Secretary-General presented his usual report on the activities of IALA during the year, highlighting the growing membership: IALA welcomed 25 new members in 2018.

In order to accommodate the increasing work load the Secretariat had been reinforced with three permanent staff members. Two were full-time replacements for the two parttime Committee Secretaries who would be leaving at the end of December 2018 and one of them had additional responsibility for liaising with and providing support to the World-Wide Academy's activities. The third new permanent staff appointment was to reinforce the administration department.

Several Councillors then reported on national matters of particular interest to the Council and referred, in particular, to cyber-security, remote pilotage, training (including distance learning), modern techniques for broadcasting maritime safety information, and the preservation of maritime heritage.

The Secretary-General informed the Council that the fourth extraordinary meeting of the Legal Advisory Panel (LAP) had been very fruitful in preparing for the third preparatory diplomatic conference scheduled to take place in Istanbul in March 2019. The LAP had used the meeting to identify the main areas that would need discussion at diplomatic level, and to consider legal issues that may arise from the latest revised text of the draft Convention that will govern IALA as an Intergovernmental Organization, when it is established.

Following the adoption by the 13th General Assembly of a resolution on the establishment of a World Marine Aids to Navigation (WAtoN) Day, on 1st July of every year, the Secretary-General had received 12 proposals - from all categories of members - with suggestions for an appropriate theme for the inaugural WAtoN Day celebrations on 1 July 2019. The Council gave unanimous support to the broad theme "Marine Aids to Navigation: Successful Voyages, Sustainable Planet". The National member of Spain had offered to host the main event and the Council encouraged other National members to organize events - and indeed all members should make the most of this special day. The 2019 theme may be reconsidered for future years or a different theme may be chosen each year; the Council decided to discuss the theme for 2020 at its 69th session.

The Council approved the budget for 2019 and noted the cash flow situation as it stood at the end of October 2018 and also the outline budget for 2020-2022.

Based on the results of the work completed by the Committees, the Council approved three new or revised recommendations, eight new or revised guidelines, and six new or revised model courses.

Last but not least, the Council approved two new National members, seven new Industrial members and one new Associate member. IALA membership was discontinued for six Industrial members, on grounds of their resignation or their non-payment of the annual contributions.

POLICY ADVISORY PANEL (PAP) MEETINGS

The Policy Advisory Panel (PAP) held two meetings in 2018. Both took place at the IALA Headquarters in St-Germain-en-Laye, with the 35th session (PAP 35) running from 14 to 16 February 2018 and the 36th session (PAP 36) from 19 to 21 September.

PAP 35

PAP 35 focused on the new Committee structure for 2018-2022 and the work programme of each of the four Committees. It considered and amended a new document (Standard, Recommendation and Guideline forward plan) that entails a new approach, mapping the work to be done by each Committee to an existing or planned guidance document. When finalised, this document will be forwarded to the Council for approval.

Consideration was given to new tasks undertaken by IALA, such as the Maritime Resource Names (.mrn), S-100 and S-200, and to the resources needed for them. The revision of IMO Resolution A.857(20) concerning Guidelines for Vessel Traffic Services was also given due consideration, with detailed explanations of the process involved in the revision work; the meeting took note that the VTS Committee had commenced revising the Guidelines without waiting for the IMO to include it in its own work programme.



As usual, all Committee Chairs reported on work accomplished. They also expanded on how the work would adapt to the new Committee structure for 2018-2022 (see also further in this report).

PAP 36

PAP 36 was briefed on the outcomes of the 13th General Assembly held in Incheon, Republic of Korea in May 2018 and on Council decisions impacting on the Committees, especially their work programme for the next four-year period 2018-2022.

Considerable work was done reviewing the IALA position document entitled "Position on the Development of Marine Aids to Navigation Services"; this document provides a clear link between the high-level Strategic Vision for 2026 and the detailed work programmes of the individual Committees. The reviewed document was forwarded to the Council for inclusion in the agenda for its 68th session in December 2018.

PAP 36 also reviewed and then agreed the work coordination table defining the various Committees' responsibilities with regard to information services.

Progress made in the revision of IMO Resolution A.857(20) concerning Guidelines for Vessel Traffic Services was noted. With this work of the VTS Committee nearing completion, a submission to the IMO was planned with a view to making a timely contribution to the relevant IMO meeting scheduled for early 2020.

There was considerable discussion about the organisation of the work with regard to S-100 and S-200 Product Specifications, both in principle and in practice.

Consideration was given to the way in which IALA may contribute to the Sustainable Development Goals (SDGs) of the United Nations that are relevant to its work.

The Secretariat was given the responsibility for finalising the revised VTS Manual and the 2018 NAVGUIDE. Both publications would be made available in digital format for downloading free of charge from the IALA website (https://www.iala-aism.org/guidance-publications/).

THE COMMITTEES AND TECHNICAL ACTIVITIES

IMPLEMENTATION OF THE NEW COMMITTEE STRUCTURE FOR 2018-2022

With the envisaged introduction of Standards from 2018 onwards, the Secretariat, in 2017, had completed an internal study on Committee arrangements for the next fouryear work period 2018-2022. This study had developed options for varying the number of Committees, with the merits and demerits of each option assessed and taking account of all known factors. One of the options was then identified as the best and keeps the number of Committees to four. However, some changes to the distribution of work were made, as described below.

Following discussion and agreement in the Policy Advisory Panel the new Committee structure for 2018-2022 was submitted to the Council, which approved it in December 2017.

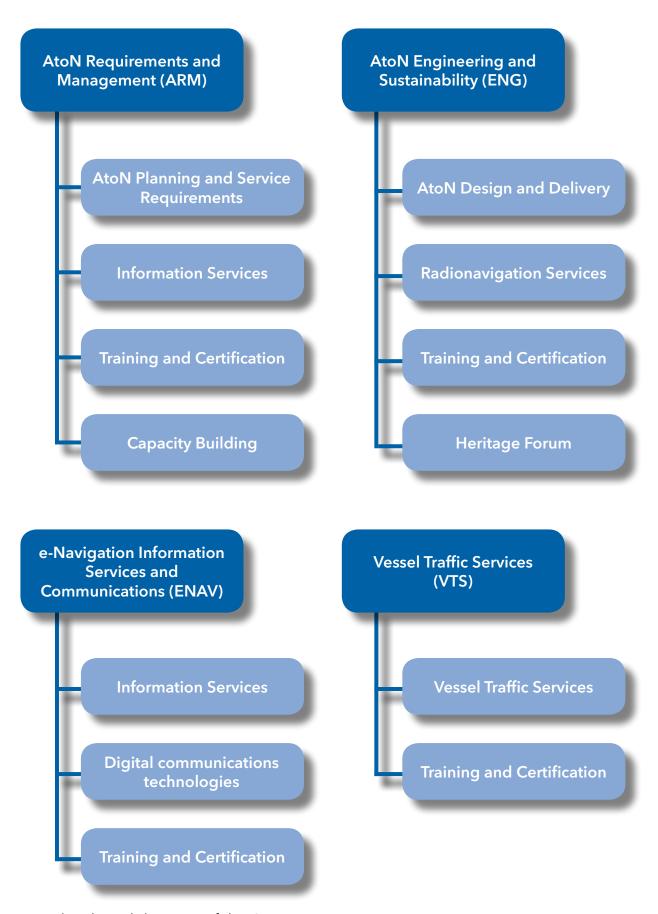
Committee Arrangements for the Work Period 2018-2022

In order to address the few problems exhibited by the previous arrangements for the four Committees (ARM, ENG, VTS and ENAV) the new Committee structure implemented in the second half of 2018 provided for a re-distribution of work domains. It was also decided to change the name of the ENAV Committee, which nevertheless was to keep its acronym ENAV.

The re-distribution of work domains as decided by the Council in December 2017 is as

- ▼ the work on Radionavigation Services has been moved to ENG and includes satellite positioning and timing, terrestrial positioning and timing, racon and radar positioning and augmentation services;
- ▼ the work of ENAV on "Terminology, symbology and portrayal" (listed under) Information Services in the Standards Map) has been moved to ARM, placing it with other items concerned with the interface to the mariner;
- ▼ the ENAV Committee has been renamed "e-Navigation, Information Services and Communications Committee" to reflect the focus of its work better, now and in future;
- the work on Information Services has been assigned to both ARM and ENAV, as
 - ARM now takes care of the management of Maritime Service Portfolios and S-200;
 - ENAV's remit now also includes data modelling; and
- capacity building has been added to ARM.





Broad technical domains of the Committees

PROGRESS REPORTS FROM THE COMMITTEES

Aids to Navigation Requirements and Management (ARM) Committee

The ARM Committee deals with high-level aspects of requirements and management of marine aids to navigation services, marine spatial planning and risk management, and the operational aspects of maritime services.

During 2018 the ARM Committee met once, for ARM 8, at the IALA Headquarters from 22 to 26 October, with 64 participants from 28 countries.

Aids to Navigation Engineering and Sustainability (ENG) Committee

The ENG Committee deals with marine aids to navigation design and maintenance, civil engineering and protection of the marine environment, light and vision physics, and radionavigation services and resilient Positioning, Navigation and Timing (PNT). It also oversees heritage matters.

During 2018 the ENG Committee met once, for ENG 8, at the IALA Headquarters from 15 to 19 October 2018, with 82 participants from 28 countries.

Vessel Traffic Services (VTS) Committee

The VTS Committee deals with all aspects of vessel traffic services including implementation, operations, equipment requirements, technology, and training and certification.

During 2018 the VTS Committee met once, for VTS 45, at the IALA Headquarters from 1 to 5 October 2018, with 96 participants from 27 countries.

The meeting agenda included finalization of a reference document containing details of all IALA documentation related to VTS with a view to assist all those involved in VTS in the effective use of the relevant IALA Recommendations, Guidelines and Model Courses. Significant progress was made with regard to the revision of IMO Resolution A.857(20) concerning Guidelines for Vessel Traffic Services, including completion of:

- a work programme for finalizing the draft revision text of the VTS Guidelines for submission, in late 2019, to the IMO, taking account of the IMO's work programme and deadline requirements; and
- a proposal for an IALA workshop to be held at the IALA Headquarters in June 2019, with the aim to broaden participation and engagement in preparing the draft revision text and thus assist the VTS Committee in finalising the work in time for the IMO meeting scheduled to address the revision of Resolution A.857(20) in early 2020.

e-Navigation, Information Services and Communications (ENAV) Committee

The ENAV Committee deals with all aspects of the technical development and implementation of e-navigation including digital information systems, emerging digital technology and digital communication systems.

During 2018 the ENAV Committee met once, for ENAV 22, at IALA Headquarters from 8 to 12 October, with 117 participants from 25 countries.



New or revised guidance documents developed by the Committees in 2018

Recommendations:

- ► R0201(E-200-1) Ed.3 Marine Signal Lights Colours
- ► R1017 Resilient Positioning, Navigation and Timing (PNT)
- ► R0127(V-127) VTS Operations

Guidelines:

- ► G1006 Plastic Buoys
- ► G1067-3 Electrical Energy Storage for AtoN
- ► G1065 AtoN Signal Light Beam Vertical Divergence
- G1141 Operational Procedures for VTS
- ► G1142 The provision of Local Port Services other than VTS
- ► G1045 Staffing Levels at VTS Centres
- ► G1128 The Specification of e-Navigation Technical Services
- ► G1139 Technical Specification of VDES

Model courses:

- ► L1.2 Master of AtoN Management
- ► L1.5 Historic Lighthouse Projects
- ► L2.1.7 Buoy Moorings
- ► L2.2.1 DC Power Systems
- ► L2.2.2 Primary and Secondary Battery Maintenance
- ► L2.2.3 Photovoltaic (Solar panel) systems and maintenance

WORLD-WIDE ACADEMY

The IALA World-Wide Academy (WWA) continues to develop and, in 2018 it once again managed to successfully execute all major tasks of the WWA Action Plan. As planned, the Academy reinforced its focus on capacity building in Africa, since this region has the highest concentration of States in need. Meanwhile education and training activities continued to expand through cooperation with numerous training organizations worldwide, based on the principles of the IALA training accreditation scheme and the further developed WWA Distance Learning initiative. In 2018, the Level 1 AtoN Manager course was delivered in English, French and Spanish and there are now more than 200 internationally certified aids to navigation managers worldwide.

The Vice-Dean, Mr Stephen Bennett, retired at the end of 2018 and IALA is thankful to him for his invaluable contribution to the development of the WWA. His replacement has been found, with the full-time appointment of an Education and Development Manager.. Looking forward, a rescheduling of tasks and responsibilities has ensured a good balance between training and capacity-building resources and competences.

Due to the increase in demand for assistance from the Academy, the main challenge continues to be to ensure that expectations are aligned and met with good quality and in a timely manner.

The International Foundation for Aids to Navigation (IFAN) continues to be the main WWA sponsor, followed by significant Korean and Malaysian funding and other support. In 2018, an agreement with Singapore was signed for a significant sponsorship from 2019 onwards. The WWA continues to be grateful to its sponsors, both direct and in-kind, small and large, and hopes it will be able to continue its important work for the foreseeable future.

FINANCIAL RESULTS

The Association is funded primarily by assessed contributions from its members, within the framework of a budget approved by the Council. Necessary appropriations have been made in the 2018 budget for the organization of the 19th IALA Conference held in Incheon, Republic of Korea and for the recruitment of three new permanent employees across the Secretariat (Strategy and Technical Operations, Finance and Administration, and World-Wide Academy).

The World-Wide Academy, which operates under a separate budget, receives voluntary contributions to financially support defined outputs in its work programme. During 2018 reserves and fund balances were fully used for the execution of the Master Plan endorsed by the World-Wide Academy Board.

The consolidated balance sheets for the period under review show a surplus of €179,998 derived from IALA's activities (+€180,983) and a deficit in the World-Wide Academy's activities (-€984).

The financial statements prepared by the newly appointed Chartered Accountant, KPMG, have been audited by the newly appointed auditor, RSM Paris. The responsibilities of the auditor include the selection of appropriate accounting methods that respect French accounting principles.

The detailed financial statements, presented in a consolidated form, together with the statutory auditor's report, are available from the IALA website (https://www.iala-aism.org/ about-iala/financial-statements/).



Consolidated balance sheets	2018	2017
ASSETS Fixed assets Current assets TOTAL ASSETS	2 185 620 3 953 287 6 138 907	2 358 718 3 723 393 6 082 112
Association funds and reserves Result of the year Subsidies of long-term investments Contingencies and loss provisions Dedicated funds Debts and liabilities TOTAL LIABILITIES	2 951 653 179 998 752 308 652 465 11 345 1 591 137 6 138 907	2 752 040 199 612 783 897 535 919 8 785 1 801 856 6 082 112
Consolidated income statements (in Euros)	2018	2017
Operating income Operating expenses OPERATING RESULT	3 721 830 3 879 302 (157 472)	3 806 838 3 647 834 159 003
Interest and other financial income Interest and other financial expenses FINANCIAL RESULT	17 378 2 971 14 406	18 590 4 652 13 938
Income from non-recurring items Expenses from non-recurring items RESULT FROM NON-RECURRING ITEMS	331 391 4 517 326 874	37 422 59 696 (22 274)
Income tax Unused resources from prior years Commitments on allocated resources	1 250 8 785 11 345	3 048 51 992 0
Total income Total expenses NET RESULT FOR THE PERIOD	4 079 385 3 899 386 179 998	3 914 844 3 715 231 199 612

World-Wide Academy financial situation in 2018 (in Euros)

	WWA (IFAN)	Republic of Korea	Malaysia	Steve Nell's Scholarship	Total
Total REVENUE (from sponsorships mainly)	781 587,61	113 100,00	100 000,00	10 000,00	1 004 687,61
Education and Training Capacity Building Other Academy related Permanent staff's costs	181 648,15 136 108,24 114 651,28 340 361,78	0,00 115 782,40 9 647,36	47 966,58 49 506,58	10 000,00	239 614,73 301 397,22 124 298,64 340 361,78
Total EXPENSES	772 769,45	125 429,76	97 473,16	10 000,00	1 005 672,37
Total	8 818,16	-12 329,76	2 526,84	0,00	-984,76

MEMBERS

MEMBERSHIP CATEGORIES

IALA membership comprises a large number of national authorities responsible for marine aids to navigation, agencies, private companies and individuals involved in aids to navigation provision and management around the world.

IALA maintains four different membership categories. Details of these, and the global reach of IALA, are displayed in the tables and the world map presented below.

Membership Category	Description
National	National Marine Aids to Navigation authorities or organizations of any country or part of a country that are legally responsible for the provision, maintenance or operation of Marine Aids to Navigation within that country or any part of that country (hereinafter referred to as National authorities) can join IALA as National members. National members are eligible for election to the IALA Council.
Industrial	Manufacturers, distributors of Marine Aids to Navigation equipment for sale and organizations providing Marine Aids to Navigation services or technical advice under contract can join IALA as Industrial members. Industrial members are entitled to participate in the IALA Committees and to exhibit their technologies during IALA conferences, symposia, workshops and seminars around the world.
Associate	Other Marine Aids to Navigation services, scientific or research organizations and other organizations, including ports, with an interest in aids to navigation or related matters can join IALA as Associate members. Associate members have the opportunity to contribute to the technical work programme of the IALA Committees.
Honorary	Honorary membership may be conferred for life on an individual who is considered by the IALA Council to have made an important contribution to the work of IALA.

NEW MEMBERS

During 2018, 25 new members joined IALA which is equivalent to a 6% increase, compared to 2017. They are listed below, in accordance with their membership category. This increase meant that the total for each category comprised 85 National members, 148 Industrial members and 63 Associate members at the end of 2018. In addition, IALA has 40 Honorary members.

New National member

✓ Sea Ports Corporation in Sudan



New Industrial members

- → DHI Group in Australia
- ✓ Shanghai Spaceflight Institute in China
- ✓ Arbo Plasticos Rotomoldados Ltda in Brazil
- ✓ Norwest Plastics Ltd in Canada
- Zhejiang Space-Iching Science Co., Ltd in China
- ▼ Wenzhou Lighthouse Electronic Technology Co., Ltd in China
- ▼ BoLoomo International Group Ltd in China
- ✓ Aqua Module in France
- Julius Marine GmbH in Germany
- ▼ TST Corporation in Japan
- ✓ Continental Shipyards Ltd in Nigeria
- Depasa Marine International Ltd in Nigeria
- Dorruna Ltd in Nigeria
- ✓ Caveman Constructions in Papua New Guinea
- ✓ Ad Engineering Limited in Papua New Guinea
- M-Nav Solutions Inc. in the Philippines (previously in Singapore)
- ✓ Inca Philippines Inc. in The Philippines
- ▼ Engineering Consultants Group (ECG) in Qatar
- ✓ St Electronics (Info -Software Systems) Pte Ltd in Singapore

New Associate members

- Svendborg International Maritime Academy in Denmark;
- Spartan Maritime (M) in Malaysia;
- ▼ Emitel Sp. Z.o.o in Poland;
- A*STAR.I2R in Singapore; and
- ✓ National Geospatial Intelligence Agency in the USA.

DISCONTINUED MEMBERSHIPS

While the overall membership has continued to grow steadily during the year under review and over the past 18 years, as shown in the table and the chart below, a number of terminations or resignations of membership are reported and have a direct impact on the table and the chart. The terminations or resignations concern the following members:

Industrial members

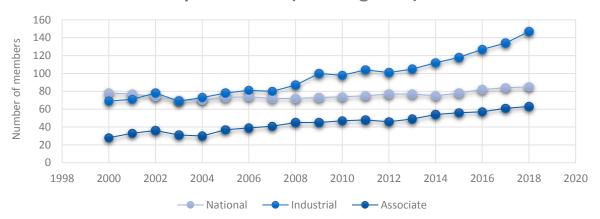
- Seven Colour Electric Lighting in Canada;
- ✓ CLS in France;
- ✓ I-Marine Technologies Inc. in Turkey;
- ✓ M-Nav Pte Ltd in Singapore (transferred to Malaysia); and
- ▼ Trelleborg Marine Systems in Sweden.

Associate members

- Direccíon de Vias Navegables in Argentina;
- ✓ Centre National d'Information et de Documentation in the Republic of Congo; and
- ✓ Panama Canal Authority.

On 31st December 2018 and taking into consideration the above discontinuations, the total number of members is brought to 295.

Membership evolution (all categories) since 2000





Countries in wich IALA has national members
Countries in wich IALA has no national member



INDUSTRIAL MEMBERS COMMITTEE (IMC)

The Industrial Members Committee (IMC) is representing equipment manufacturers and distributors of marine aids to navigation systems from around the world. The expertise it represents is vital to the work of the Committees and ensures the continued relevance of IALA's technical work. Industrial members provide invaluable knowledge, expertise and first-hand experience, while their participation in the meetings of the Committees and related workshops and seminars enables them to take part directly in the development of guidance documentation and contribute to the establishment and harmonization of standards that are accepted and used worldwide.

The IMC consists of six elected companies that are Industrial members of IALA. It enjoys observer status at meetings of the Council and the Policy Advisory Panel.

During the year under review the IMC undertook the demanding task of organising the large industrial exhibition that was staged concurrently with the 19th IALA Conference held in Incheon in the Republic of Korea in May 2018. It also hosted the memorable Industrial members' evening, which was held in open air in the enchanting terrace gardens at Gyeongwonjae Ambassador, where delegates were treated to a feast of national dishes and spectacular cultural and light shows.

As is customary on the occasion of the quadrennial IALA Conference, the IMC convened its own General Assembly of Industrial members, during which the new IMC was elected for the next four-year period 2018-2022, comprising the following companies:

Americas: Tideland Signal Corporation (USA)
Asia/Oceania: Zeni Lite Buoy Co Ltd. (Japan)

Europe/Africa: Sabik (Finland)

Brazil (next Conference host):Arbo Plasticos Rotomoldados Ltda Member at large: Australian Maritime Systems (Australia)

Member at large: Sealite Pty Ltd. (Australia)



COOPERATION WITH OTHER INTERNATIONAL BODIES



To achieve its objectives, IALA cooperates with a number of international bodies, both intergovernmental organizations (IGOs) and non-governmental organizations (NGOs). Over the years it has established a Memorandum of Understanding with a number of them - as listed here:

International Hydrographic Organization (IHO)

International Navigation Association (PIANC)

Comité International Radio Maritime (CIRM)

International Harbour Masters' Association (IHMA)

The Nautical Institute (NI)

International Mobile Satellite Organization (IMSO)

International Maritime Pilots' Association (IMPA)

The Maritime Organisation for West and Central Africa (MOWCA)

Secretariat of the Pacific Community (SPC)

International Association of Institutes of Navigation (IAIN)

In addition, IALA works in close cooperation with the following IGOs and NGOs:

International Maritime Organization (IMO)

International Telecommunication Union (ITU)

Arctic Council

Far East Radionavigation Service (FERNS)

Commission Electrotechnique Internationale (CEI)

Commission Internationale de l'éclairage (CIE)

International Chamber of Shipping (ICS)

International Federation of Shipmasters' Association (IFSMA)

International Association of Dry Cargo Shipowners (INTERCARGO)

International Association of Independent Tanker Owners (INTERTANKO)

Intergovernmental Oceanographic Commission (IOC)

Radio Technical Commission for Maritime Service (RTCM)

World Meteorological Organization (WMO)

GOVERNANCE ARRANGEMENTS GENERAL ASSEMBLY

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



National members attending the General Assembly are entitled to:

- determine the broad policy direction of IALA;
- ✓ elect members to the Council;
- ✓ decide upon changes to the IALA Constitution; and
- ✓ decide on IALA Standards (from 2018 onwards).

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

COUNCIL

The Council elects the IALA President and approves the strategic direction, the annual budget, and the rates for members' annual contributions. It also authorizes any major financial purchases or bank loans required for the running of IALA.

The Council has 24 members, comprising three non-elected members and 21 elected members. These are a National member of IALA's host country (France), the National member having hosted the last IALA Conference, and the National member hosting the next Conference.

As reported elsewhere in this report, a new Council for the period 2018-2022 was elected during the 13th General Assembly held in Incheon, Republic of Korea in May 2018.

FINANCE AND AUDIT COMMITTEE (FAC)

The role of the Finance and Audit Committee (FAC) is to submit to the Council, twice a year, recommendations related to financial matters including the execution of the budget, investments, audit observations and the status of membership contributions.

The FAC consists of five members who are elected from amongst the members of the Council. In 2018, France, Germany, Malaysia, South Africa and the United Kingdom were elected for the period 2018-2022. The Councillor for the United Kingdom and IALA Treasurer, Captain Ian Mc Naught, was re-elected as FAC Chair.

POLICY ADVISORY PANEL (PAP)

The Policy Advisory Panel (PAP) advises the Council on strategy and policy matters related to the technical activities of IALA. The PAP convenes twice a year under the chairmanship of the Deputy Secretary-General. Its members include the four Committee Chairs and Vice-Chairs, the Chair of the Council's Legal Advisory Panel and the Dean of the World-Wide Academy.

LEGAL ADVISORY PANEL (LAP)

The Legal Advisory Panel (LAP) advises the Council on legal aspects of all technical activities and convenes twice a year. In addition, it has undertaken extensive work on the planned change of IALA's status to an Intergovernmental Organization (IGO), including the development of the draft IALA Convention, mainly through extraordinary meetings. Due to this commitment, the LAP did not hold any regular meetings during 2018.

Since 2018 the LAP has been chaired by Ms Christina Schneider of Germany, who succeeded Mr Jon Price of the United Kingdom, following his retirement.

ADMINISTRATIVE ARRANGEMENTS

AUDITOR AND CHARTERED ACCOUNTANT

A new external auditor was appointed by the Council in 2018, selected from amongst the best international accounting firms and experienced in the not-for-profit sector, and with the following terms of reference:

- ✓ review the annual financial statements;
- ✓ provide an opinion on the accounts of the Association;
- ✓ examine risks and controls within IALA's financial governance arrangements; and
- ✓ make appropriate recommendations for improvement.

A new team of reputable chartered accountants was also appointed to assist the Secretariat with regard to staff matters (remuneration and social contributions) and the closing of accounts.

These new arrangements will provide IALA with a multidisciplinary approach and the required expertise in view of the anticipated change of status to an Intergovernmental Organization.

SECRETARIAT

The Secretariat is based in Saint-Germain-en-Laye, near Paris, France and consists of 12 permanent staff members - seven women and five men. 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.

Staff are organized into three divisions: Strategy and Technical Operations, Finance and Administration, and the World-Wide Academy. With the appointment of three new permanent staff members during 2018, IALA has pursued a robust internal reorganization to improve the overall effectiveness of the Secretariat, further enhanced by the comprehensive refurbishment and modernization of the Headquarters offices and meeting rooms completed in 2017.

The structure of the Secretariat is shown in the organizational chart beside.





Secretary-General

Omar Frits Eriksson



Deputy Secretary-General

Christine Philip

Dean of the World Wide Academy



Kevin Gregory

Resources Manager Capacity Building &



Minsu Jeon

Administration Manager

Audrey Guinault

Finance and

Jacques Manchard Manager



Senior Advisor



Executive Assistant

Operations Manager

Technical

Administrative Assistant Tom Southall

Isabelle Bracq

Lorraine Mbong

Marie-Hélène

Grillet





Technical Officer





Events & Documents Coordinator

Administrative Accounting &

Assistant

Membership and Finance Officer



10, rue des Gaudines - 78100 Saint Germain en Laye, France Tél. +33 (0)1 34 51 70 01- Fax +33 (0)1 34 51 82 05 - contact@iala-aism.org www.iala-aism.org

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