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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 harmonisation of navigation services worldwide.
A MESSAGE FROM THE PRESIDENT AND THE SECRETARY-GENERAL

We are pleased to present IALA’s Annual Report for 2015, a year of important new achievements as well as steadfast continuity in the technical work undertaken in the Committees and Working Groups.

Our four Committees have been very busy with their first full year of work on the 2014-2018 work programme and one workshop and one seminar have been held within the remit of this work programme. The execution of the Change of Status Action Plan has continued apace. The year concluded with the Council deciding, at its December session in Dakar, Senegal, that the draft text of the new Convention on IALA as an Intergovernmental Organization (IGO) was ready for wider distribution, in support of the necessary diplomatic action. Our special thanks go to the Change of Status Advisory Group for its assistance in keeping the project on track. We have also appreciated the detailed drafting work of the Legal Advisory Panel.

IGO status will strengthen IALA’s existing cooperation with its partner international organizations and enhance significantly the international endorsement of IALA’s activities and the standards it seeks to achieve to improve and harmonize aids to navigation worldwide.

The Secretariat continue the ambitious modernization of the organization. The substantial progress made with upgrading the IT and meeting facilities at our headquarters offices in Saint-Germain-en-Laye is particularly noteworthy. IALA has completed the first phase of its rebranding process with the adoption of a new logo and the implementation of new branding guidelines.

We continue to be very proud of the achievements of the IALA World-Wide Academy and are particularly indebted to the generous support of sponsors. Thanks to this sponsorship the Academy was able to conduct more Stage 2 Technical Needs Assessment Missions and facilitated the accreditation process of Aids to Navigation training institutes in most of its target regions.

We feel very encouraged by the expressions of interest in IALA from non-member countries, aided by the Academy’s growing activities in capacity building awareness raising in lesser developed countries and in the facilitation of access to IALA-endorsed training. It is very good to see that IALA is increasingly engaged with the expanding maritime development in emerging countries as they seek to build their national economies.

The fact that our financial position is stable and that overall membership continues to grow steadily - it increased by 5% from 2014 - is perhaps the best indication that our position as the peak international technical body in our field of expertise remains rock solid. We wholeheartedly thank the dedicated staff of the IALA Secretariat, and all others who contribute their knowledge and experience to our work. It is the will to cooperate that has always been the driving force of IALA.

Juan Francisco REBOLLO
PRESIDENT

Francis ZACHARIAE
SECRETARY-GENERAL
The Strategic Vision for IALA was approved by Council in December 2013. It covers the work period 2014 to 2026 and aims at achieving the following two Goals by the end of that period.

Ensure that aids to navigation systems and related services, including e-Navigation, Vessel Traffic Services, and emerging technologies, are harmonised through international cooperation and the provision of standards.

All coastal states have contributed to an efficient global network of aids to navigation and services for the safety of navigation, through capacity building and the sharing of expertise.

In order to achieve those Goals, the Strategic Vision has a series of Strategies for 2014-2026 and a set of Priorities for 2014-2018. The complete document may be accessed on the IALA website.
MANAGEMENT OF TECHNICAL ACTIVITIES

The management of the technical work is the responsibility of the Deputy Secretary-General, assisted by the Technical Operations Manager and her team of four supporting staff.

The Deputy Secretary-General chairs meetings of the Policy Advisory Panel (PAP) twice per year, with membership including the leaders of the technical Committees, the leaders of the Legal Advisory Panel, and the Dean of the World-Wide Academy. The PAP provides advice on technical strategy and policy to the Council, both directly and via the Council Strategy Group.

TECHNICAL DOCUMENTS

A primary driver towards the harmonisation goal is the creation of technical guidance documents for aids to navigation including vessel traffic services. This work is carried out by four technical Committees. Committee Chairs appointed from national member organisations structure and manage the work of the Committees, including establishing working groups and appointing the leaders of these groups.

Within the content of the Strategic Vision is the creation of Standards. These are the top level of technical documents and are supported by Recommendations at the second level, suitable for management, and Guidelines at the third level and with considerable technical content. The documents scheme is completed by Manuals, including the IALA Dictionary, and Model Courses.

Standards were introduced to the document structure in 2014 and the first seven drafts will be considered by the next General Assembly of national members, to be held in the Republic of Korea in 2018. They will be suitable for citation in legislation or regulations.

The remaining documents constitute the bulk of the committee work. The Council approves these before they are made available on the website.
IALA continues to place considerable emphasis on strong governance arrangements. This is increasingly important as the organization moves towards inter-governmental status.

Governance arrangements, including the IALA General Assembly and Council, ensure that IALA remains accountable for its actions and is in a position to respond to the developing needs of its members and to global changes.

The IALA General Assembly brings together members from all its membership categories every four years, and these meetings are usually held in conjunction with an IALA Conference.

At the General Assembly, national members:

- determine the broad overall policy direction of IALA;
- elect members to the Council;
- decide upon changes to the Constitution; and
- from 2018, will decide on Standards.
IALA is headed by a President elected by the IALA Council. The IALA Council comprises 21 elected and three non-elected members. It approves the strategic direction, the annual budget, and the rates for annual members’ contributions. It also approves the Committee work programme and the subsequent technical documents developed by the Committees.

At 31 December 2015, the Council consisted of:

- IALA President: Mr Juan Francisco Rebollo (Puertos del Estado), Spain
- IALA Vice-President: Mr Noh, Jin Hak, Ministry of Oceans and Fisheries, Korea
- Treasurer and Chairman of the Finance and Audit Committee: Captain Ian McNaught, Trinity House, UK
- Australian Maritime Safety Authority, Australia, represented by Mr Brad Groves
- Centro de Sinalização Nautica Almirante Moraes Rego, Brazil, represented by Captain Alexandre Coelho Gomes
- Armada de Chile - Directemar, Chile, represented by Rear Admiral Umberto Ramirez
- Maritime Safety Administration, China, represented by Captain Chen Aiping
- Danish Maritime Authority, Denmark, represented by Mr Troels Blicher Danielsen
- Finnish Transport Agency, Finland, represented by Ms Tiina Tuurnala
- Ministère de l’Ecologie, de l’Energie et du Développement Durable, France, represented by Captain Vincent Denamur
- Federal Waterways and Shipping Administration, Germany, represented by Mr Christian Forst
- Directorate General of Lighthouses and Lightships, India, represented by Captain A.M. Surej
- Commissioners of Irish Lights, Ireland, represented by Ms Yvonne Shields
- Italian Coast Guard - Headquarters, Italy, represented by Rear Admiral Piero Pellizzari
- Japan Coast Guard, Japan, represented by Vice Admiral Akihito Hirota
- Light Dues Board Peninsular Malaysia, Malaysia, represented by Haji Baharin bin Dato Abdul Hamid
- Ministry of Infrastructure and the Environment, The Netherlands, represented by Ms Brigitt Gijsbers
- Norwegian Coastal Administration, Norway, represented by Ms Kirsti Slotsvik
- Portuguese Navy Lighthouse Authority, Portugal, represented by Commander José Maria da Silva
- Port Autonome de Dakar, Senegal, represented by Captain Amadou Ndiaye
- Transnet National Port Authority, South Africa, represented by Mr David Gordon
- Swedish Maritime Administration, Sweden, represented by Mr Ove Eriksson
- Directorate General of Coastal Safety, Turkey, represented by Mr Levent Kalfa
- US Coast Guard, USA, represented by Captain Scott Smith
The IALA Finance and Audit Committee (FAC) operates under the direction of the IALA Council. Under the Chairmanship of the IALA Treasurer Captain Ian McNaught, the FAC is responsible for reviewing and overseeing the financial aspects of IALA. The FAC provides briefs to IALA Council every six months on the status of IALA’s finances and makes recommendations regarding contribution adjustments, investment policies and other financial matters.

The FAC now assumes responsibility for the oversight of the external auditor process and the management of its findings.

The Strategy Group is a means for Councillors to discuss matters that impact policy decisions in the formal Council meetings and to consider advice from experts, the Secretariat, and the Policy Advisory Panel. At December 2015 it was chaired by the Federal Waterways and Shipping Administration, Germany, represented by Mr Christian Forst.

During its 61st session in December 2015 the IALA Council appointed Captain Scott Smith of the US Coast Guard Vice Chair of the Strategy Group.
AUDITOR AND CHARTERED ACCOUNTANT

Finance records are maintained by the Secretariat with the advice of a Chartered Accountant to ensure that they are transparent and in accordance with French accounting practice. The Chartered Accountant prepares the annual financial statements that are submitted to the Council after they have been assessed by the Auditor.

The Auditor is in charge of reviewing the annual financial statements, providing comments on the accounts and giving specific advice when needed.

SECRETARIAT

A fifteen person Secretariat with a combination of full-time and part-time staff is based at IALA Headquarters in Saint-Germain-en-Laye, France. The Secretariat is supported by officers seconded from national members.

IALA’s Secretariat is led by a Secretary-General, who works closely with the Deputy Secretary-General, the Dean of the IALA World-Wide Academy and other senior staff to shape the direction of the organization and manage its operations.

During the year 2015, the Secretariat saw important changes, with the appointment of Francis Zachariae who succeeded Gary Prosser as Secretary-General, and the recruitment of two new staff members. Gerardine Delanoye was engaged as the full time Academy Programme Manager and Audrey Guinault took on the role of Administrative Assistant. The Secretariat was also reorganized to give IALA a “three pillar” shape – Academy, Administration and Technical.

At 31 December 2015, the structure of the IALA secretariat was:

- Jean-Charles Leclair: Dean of the World Wide Academy
- Stephen Bennett: Vice Dean of the World Wide Academy
- Jacques Manchard: Senior Advisor
- Gerardine Delanoye: Programme Manager
- Audrey Guinault: Administrative Assistant
- Christophe Laglenne: General Duties
- Gerardine Delanoye: Experts
- Jacques Manchard: Senior Advisor
- Gerardine Delanoye: Programme Manager
- Audrey Guinault: Administrative Assistant
- Christophe Laglenne: General Duties
- Stephen Bennett: Vice Dean of the World Wide Academy
- Jean-Charles Leclair: Dean of the World Wide Academy
IALA ACTIVITIES

2015 was another busy year for IALA. Below is a ‘snapshot’ of key activities and events conducted by IALA and its Academy during the year. Further details of many of these activities are contained throughout this report.
<table>
<thead>
<tr>
<th>Month</th>
<th>IALA</th>
<th>World-Wide Academy</th>
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</table>
| January | e-Navigation Underway Conference, Denmark  
VTS Committee Working Group 2 at HQ | Assess VTS training in Abidjan Academy, Cote d’Ivoire |
| February| ENAV Committee Working Group 3 at HQ | Deliver lectures to VTS Operator course in Dumai, Indonesia  
AtoN training facilitation mission to MATRAIN, Malaysia  
AtoN training facilitation mission to Pacific Community, Suva, Fiji  
South-West Pacific Hydrographic Commission Cook Islands |
| March   | LAP 14 - Shanghai, China | Joint IALA/IHO Safety of Navigation seminar Panama  
North Indian Ocean Hydrographic Commission Muscat, Oman  
Technical needs assessment mission to Vietnam (north) |
| April   | Change of Status Council Group, Madrid, Spain  
VTS39, HQ  
VTS2016 Presentation selection committee  
ENAV16, HQ | High level mission to Indonesia  
Technical needs assessment mission to Cote d’Ivoire  
AtoN training facilitation mission to Puertos del Estado, Madrid, Spain |
| May     | Change of Status Council Group, HQ  
ENAV Committee Working Group 3, HQ  
ENG2, HQ  
ARM2, HQ  
Council 60, Kuala Lumpur, Malaysia | AtoN training facilitation mission to China  
High level mission to Vietnam |
| June    | PAP29, HQ  
Change of Status Council Group, HQ  
LAP Working Group, HQ | IMO Maritime Safety Committee, London UK  
Technical needs assessment mission to Suriname  
Technical needs assessment mission to Brunei Darussalam  
e-Navigation conference Bulgaria  
IMO Technical Cooperation Committee, London, UK |
| July    | Level 1 Course, HQ | Level 1 Course, HQ  
Awareness seminar Republic of Korea  
Planning mission in Abidjan Cote d’Ivoire for Dakar workshop |
| August  | Level 1 Course, HQ  
Planning mission in Abidjan Cote d’Ivoire for Dakar workshop | Level 1 Course, HQ  
Awareness seminar Republic of Korea  
Planning mission in Abidjan Cote d’Ivoire for Dakar workshop |
| September | LAP15, HQ  
e-Navigation Underway North-America, USA | High level mission to Cambodia  
Liaison mission to World Maritime University, Malmö, Sweden  
Level 1 course, China |
| October | Workshop on Human Factors and Ergonomics, Gothenburg, Sweden  
VTS40, HQ  
ENAV17, Brest, France | Risk management seminar Singapore French Level 1 Course, Brest and HQ |
| November | Change of Status Council Group, HQ  
PAP30, HQ  
ENG3, HQ  
ARM3, HQ | Spanish Level 1 course, Madrid and HQ  
Joint Capacity Building Working Group, Geneva, Switzerland  
ASEAN VTS seminar, Tokyo, Japan  
Technical follow-up mission to Suriname  
Level 2 Technician course, Brest France |
| December | Seminar on Maritime Digital Infrastructure and Testbeds, Gothenburg, Sweden  
Council 61, Dakar, Senegal | Technical needs assessment mission to Antigua and Barbuda  
Joint IHO/IALA/IMO safety of navigation seminar Antigua and Barbuda  
Meso America and Caribbean Hydrographic Commission, Antigua and Barbuda  
AtoN workshop, Dakar, Senegal |
THE COUNCIL

The Council held two meetings in 2015. Session 60 was held in Kuala Lumpur, Malaysia in May and session 61 took place in Dakar, Senegal in December.

At its 60th session the Council noted the progress made in the project for a change to intergovernmental organization status, the reorganisation of the Secretariat and the Committee work. It approved the financial statement for 2014 and decided the member contribution rates for 2016. The Committees had submitted five draft new or revised IALA Recommendations, four new or revised IALA Guidelines and one new Model Course. All were approved and are now available for download from the IALA Website.

Session 61, which took place in Dakar, Senegal in December approved in principle the Basic Documents for IALA and approved the Standards structure for further work. A draft Convention text was approved so that diplomatic process could continue for the transition of IALA towards an IGO. A new Recommendation, a new Guideline and four Model Courses that had been submitted by the Committees were approved. Finally, the Council also made a new Decision governing the World-Wide Academy and appointed its six Board members for the next four years.

THE COMMITTEES AND TECHNICAL ACTIVITIES

The four Committees for the period 2014-2018 and their allocated technical domains are the following:

<table>
<thead>
<tr>
<th>Committee Title</th>
<th>Technical Domains</th>
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| AtoN Requirements and Management Committee (ARM)      | 1- Risk management  
2- Requirements for AtoN systems  
3- Management of AtoN Services  
4- Marine Spatial Planning |
| e-Navigation (ENAV)                                   | 1- Data modelling and message systems  
2- e-Navigation communications  
3- Shore technical infrastructure  
4- e-Navigation test beds  
5- Maritime service portfolios |
| AtoN Engineering and Sustainability (ENG)             | 1- Light and vision physics  
2- AtoN design and maintenance  
3- Global capacity building and training  
4- Civil engineering and environment  
5- Maintenance of heritage structures |
| Vessel Traffic Services (VTS)                         | 1- Operations  
2- Technology  
3- VTS Training |

Phil DAY

The ARM Committee deals with high level aspects of requirements and management of Aids to Navigation systems, and Marine Spatial Planning.

The Committee met twice in 2015 at IALA headquarters (ARM 2 25-29 May and ARM 3 23-27 November) with a stable attendance of about 40 participants from 23 countries and one sister organization.

Significant outputs and achievements by the Committee during 2015 included:

- Updates of the NAVGUIDE and coordination with other committees
- Progress on the development of four new Recommendations / Guidelines on:
  - Marking of wreckage
  - Disaster recovery
  - The use of Marine Spatial Planning
  - AtoN in environmentally protected areas
- Contributions to the IALA Wiki as part of initial stages of restructuring
- Considerations of the document structure in relation to the proposed standards
- The Committee will continue to monitor portrayal and the use of pictograms on AtoN.

The planning for a workshop on “AIS AtoN (real and virtual) developments and their uses” for Autumn 2016 in Korea has been started.

Simon MILLYARD

During 2015, the Engineering & Sustainability Committee met twice with each session attracting typically 50 participants from across the world. The main activity of the Committee is to review the existing Guidelines and Recommendations to ensure that they provide excellent information to support the range of technical activities required
to design, install and maintain Aids to Navigation in an efficient and environmentally responsible manner. Some documents are being re-written or updated and others merged in order to provide a logical structure to support the proposed Standards as IALA moves towards its change of status.

Other activities include support for the World-Wide Academy in writing and reviewing training courses, planning workshops and work has commenced on reviewing the content of the IALA Dictionary with a new process for inclusion of new entries and the common referencing of accurate definitions across publications.

In 2015 the Committee produced a revised version of Recommendation E-141 on Standards for training and certification of AtoN personnel and four new or revised Model Courses for use by the Academy.

Participation is good with many interesting presentations on emerging technology and its application and of experiences with established equipment, all are pitched in sharing best practice in efficient and sustainable AtoN delivery.

Vessel Traffic Service (VTS) Chair Tuncay Çehreli, Directorate General of Coastal Safety, Turkey:

Vessel Traffic Service (VTS) Chair Tuncay Çehreli, Directorate General of Coastal Safety, Turkey:

The VTS Committee deals with all aspects of VTS such as implementation, operations, equipment requirement, technology, training and certification.

The Committee met twice in 2015 at IALA Headquarters (VTS39 13-17 April and VTS40 19-23 October) and continues to attract increasing participation from national, industrial and associate members. 86 members from 28 countries and 3 sister organizations participated in VTS40.

Significant outputs and achievements by the Committee during 2015 included:

- Revision/update of the IALA Recommendation V-128 on Operational and Technical Performance of VTS Systems
- Development of the following IALA Guidelines:
  - Guideline No. 1111 on Preparation of Operational and Technical Performance Requirements for VTS Systems
  - Guideline No. 1115 on Preparing for an IMO Member State Audit Scheme (IMSAS) on Vessel Traffic Services
- Development of IALA VTS Strategy paper addressing the delivery of VTS in a rapidly changing world
- Development of IALA VTS Questionnaire
- Development an INF paper to IMO NCSR3 on Vessel Traffic Services in a Rapidly Changing World
- Events - The VTS Committee successfully delivered one Workshop in 2015.
Considerable progress was also made during 2015 on updating the IALA VTS Manual to be issued at the 13th International VTS Symposium, 8-12 August 2016, Kuala Lumpur, Malaysia, including developing a Model Course on Revalidation Process for VTS Qualification and Certification, and producing a Guideline on Marine Casualty Incident Reporting and Recording, including Near Miss Situations as it relates to VTS.

e-Navigation Committee (ENAV) Chair Omar Frits Eriksson, Danish Maritime Authority, Denmark:

Omar Frits ERIKSSON

The ENAV Committee deals with all aspects of the development and implementation of e-Navigation including data modelling and message systems, communications, shore technical infrastructure, testbeds and Maritime Service Portfolios.

The Committee met in IALA Headquarters in April 2015 (ENAV16) and in Brest, France in October 2015 (ENAV17) in association with the Safer Seas conference. Participation was enthusiastic with attendance of up to 140 participants from 28 countries and 5 sister organizations in the latter meeting. Six industrial members provided an exhibition of the latest AtoN equipment during ENAV17 in Brest.

During 2015 the ENAV Committee significant outputs and achievements included:

- The development of two new Recommendations
  - e-Nav-147 on product specification development and management
  - e-Nav-148 on the Need to Develop Regional Solutions Based on International Standards
- The revision of two Recommendations
  - R-121 on DGNSS
  - e-Nav-140 on the Architecture for Shore Based Infrastructure “Fit for e-Navigation”
- The development of three new Guidelines
  - 1112 on the Performance and Monitoring of DGNSS Services in the Frequency Band 283.5 – 325 kHz
  - 1113 on Design and Implementation Principles for Harmonized System Architecture of Shore Based Infrastructure
  - 1114 on a Technical Specification for the IALA Common Shore Based System Architecture (CSSA).
- Provision of support for the World-Wide Academy through development of a model course on e-navigation.
- Organisation of a Seminar on Maritime Digital Infrastructure and Testbeds in association with the Swedish Maritime Administration (SMA), Viktoria Swedish ITC,
the Danish Maritime Authority and the Korea Research Institute of Ships and Ocean Engineering (KRISO) in Gothenburg, in December 2015.

- Development of the concept of unique identifiers for maritime resources, the principle of which facilitates global harmonisation of information flow in e-Navigation, which may potentially be adopted by the whole maritime community including IHO and IMO.
- On-going liaison with the IEC, IMO, ITU and WMO to progress international standards on e-Navigation.
- Development of the VDES (VHF data exchange system) as the successor for the AIS.
- A contribution was made to the ITU Radio Assembly decision at WRC15 regarding adoption of the ITU Recommendation ITU-R M.[VDES] which is fundamental to the future development of e-Navigation communications
- Development of R-Mode (ranging mode) in which DGPS and AIS signals are used as a source of radio ranging information.
- Development of the promulgation of testbed information via e-navigation.net as the global repository for e-navigation testbed reporting.
- Development of Maritime Service Portfolios which will describe the operation and technical services in e-navigation, leading to an IALA Guideline.

The planning of a workshop on shore based maritime services from theory to practical use to be held in Portugal and a workshop on VDES in Japan in 2016 was initiated.

Legal Advisory Panel (LAP) Chair Jon Price, Trinity House, UK

Jon PRICE

The IALA Legal Advisory Panel (LAP) is an advisory body to the IALA Council. During 2015 the focus of the LAP was on supporting the Council on governance with the development of a set of Basic Documents for IALA comprising General Regulations, Financial Regulations and other high level procedural documents. The Basic Documents will support the current IALA Constitution and will become the recognised basis upon which IALA functions ensuring good governance and transparency.

The LAP also supported the Council and its Change of Status Advisory Group with the move of the Organization from a Non-Governmental Organization governed by French Law to an Inter-Governmental Organization operating under International law. Work was carried out on the draft Convention text, which will enable the change of status, and the General Regulations, which will provide the detail to support the Convention using as a starting point the General Regulations in the Basic Documents.

The Panel also provided advice on risk management, legal liability issues and contractual matters to the Council, its Committees and the World-Wide Academy.

In addition the LAP assisted with the development of a structure and template for IALA Standards and looked at the admissibility of AIS data in Court cases in different jurisdictions.
2015 was a significant year for the Academy with the recruitment of a full-time Programme Manager to administer its new Board-approved Master Plan for the delivery of training and capacity building with tight budgetary limits. Capacity Building is the development and strengthening of human and institutional resources. AtoN Competent Authorities in developing countries are obliged to deliver AtoN services, but sometimes lack the capacity to do so. The Academy actively facilitates that process through technical missions and training events whilst maintaining joint capacity building activity under the United Nations banner of “Delivering as One”.

The new Master Plan, which is available on the Academy page of the IALA website, specified 69 target states in five geographical regions (reductions of nine and two respectively from the earlier Plan). The focus in 2015 switched from “awareness” seminars to “high level” missions and technical needs assessment missions. This resulted in the removal of one target state (Suriname) because it demonstrated that its aids to navigation service provision was in accordance with international standards. Others are expected to follow.

The policy of delivering both aids to navigation and Vessel Traffic Service model courses in regional Accredited Training Organisations (ATO) was developed significantly in 2015 through specific training facilitation missions. This resulted in an additional six ATOs being added to the list published on the IALA website.

DELIVERABLES

- 5 “high level” missions conducted by the Dean
- 4 capacity building awareness-raising seminars for 135 participants from 14 target states
- 6 training facilitation missions
- 2 Level 1 AtoN manager courses in English for 26 participants (Headquarters and China); 1 in French (Brest and Headquarters – 1 participant from a target state) and the first in Spanish (Madrid and Headquarters - 3 participants from target states)
- The first Level 2 Technician course (France)
- Annual risk management seminar in Singapore
- 5 technical needs assessment missions
- The first follow-up analysis mission
- Active participation in 4 regional hydrographic commissions

OUTLOOK FOR 2016

Demand for the Academy services increased in 2015 and this trend is expected to grow. The resource of staff and experts is just sufficient to meet our commitments, however funding for this activity remains very tight despite superb support from our principle sponsors and national members who provide their experts at no cost to the Academy. Additional sources of funding will need to be identified and the appointment of a new full-time Dean will assist this process.
Since the establishment of the Academy in 2012, seventy-four staff from target regions or IALA members graduated in accordance with the Academy curriculum for Level 1 Aids to Navigation manager training. Formal training commenced in 2014.

<table>
<thead>
<tr>
<th>Country</th>
<th>Target Region</th>
<th>2012</th>
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<td>Vietnam</td>
<td>Far East</td>
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<td>Bahrain</td>
<td>Near East</td>
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<td>India</td>
<td>Near East</td>
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<td>Oman</td>
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<td>Columbia</td>
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<td>Cuba</td>
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</tr>
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<td>Ecuador</td>
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<tr>
<td>El Salvador</td>
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</tr>
<tr>
<td>Guadeloupe (French West Indies)</td>
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<td>1</td>
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<tr>
<td>Guatemala</td>
<td>Mezzo America and Caribbean</td>
<td>1</td>
<td></td>
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</tr>
<tr>
<td>Mexico</td>
<td>Mezzo America and Caribbean</td>
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<td>Nicaragua</td>
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<td>Suriname</td>
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<tr>
<td>Trinidad and Tobago</td>
<td>Mezzo America and Caribbean</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Fiji</td>
<td>Pacific</td>
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<tr>
<td>Solomon Islands</td>
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Non-Target Regions

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<th>Country</th>
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<th>2012</th>
<th>2014</th>
<th>2015</th>
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<tr>
<td>France</td>
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<td>4</td>
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</tr>
<tr>
<td>Russia</td>
<td></td>
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<td>1</td>
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<tr>
<td>Spain</td>
<td></td>
<td>1</td>
<td>2</td>
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<tr>
<td>United Kingdom</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total</td>
<td></td>
<td>9</td>
<td>20</td>
<td>45</td>
</tr>
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</table>

The Final Level 1 AtoN manager course delivered by the Academy will be held in IALA Headquarters in 2016. From 2017 potential AtoN managers and technicians will need to be trained at one of the growing number of Accredited Training Organisations (ATO) springing up in strategic locations around the world. Details of existing and new ATOs can be found under the “training” tab on the Academy page of the IALA website.
IALA closed its financial year with a net consolidated surplus of €244,014, which was the result of a greater than expected growth in membership and measures taken to manage the Organisation in an efficient and effective manner.

The further development of IALA’s activities and the increasing numbers participating in Committee meetings necessitated investment during the year in better video conferencing equipment and the recruitment of one new permanent staff member to support the administrative team.

The year’s surplus will be utilised for further investment in capital facilities to meet the demands of the greater Committee attendance. The Secretariat will also need additional strengthening to support present commitments and the future needs of operating as an Intergovernmental Organization.

CONSOLIDATED INCOME STATEMENT (in Euros)

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total operating income</td>
<td>3 111 593 €</td>
<td>2 741 737 €</td>
</tr>
<tr>
<td>Total operating expenses</td>
<td>2 952 064 €</td>
<td>2 534 501 €</td>
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<tr>
<td><strong>OPERATING RESULT</strong></td>
<td>159 529 €</td>
<td>207 236 €</td>
</tr>
<tr>
<td>Total interest and other financial income</td>
<td>42 367 €</td>
<td>35 905 €</td>
</tr>
<tr>
<td>Total interest and other financial expenses</td>
<td>2 131 €</td>
<td>212 €</td>
</tr>
<tr>
<td><strong>FINANCIAL RESULT</strong></td>
<td>40 236 €</td>
<td>35 693 €</td>
</tr>
<tr>
<td>Total extraordinary gains</td>
<td>55 630 €</td>
<td>58 871 €</td>
</tr>
<tr>
<td>Total extraordinary losses</td>
<td>7 199 €</td>
<td>6 771 €</td>
</tr>
<tr>
<td><strong>EXTRAORDINARY RESULT</strong></td>
<td>48 431 €</td>
<td>52 100 €</td>
</tr>
<tr>
<td>Income tax</td>
<td>4 182 €</td>
<td>7 667 €</td>
</tr>
<tr>
<td>Total gains</td>
<td>3 209 590 €</td>
<td>2 836 513 €</td>
</tr>
<tr>
<td>Total expenses</td>
<td>2 965 576 €</td>
<td>2 549 151 €</td>
</tr>
<tr>
<td><strong>NET RESULT FOR THE PERIOD</strong></td>
<td>244 014 €</td>
<td>287 362 €</td>
</tr>
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</table>
CONSOLIDATED BALANCE SHEET (in Euros)

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSETS</strong></td>
<td><strong>GROSS</strong></td>
<td><strong>Depreciation &amp; allowances</strong></td>
</tr>
<tr>
<td>Total fixed assets</td>
<td>2 954 248</td>
<td>672 676</td>
</tr>
<tr>
<td>Total current assets</td>
<td>3 315 193</td>
<td>260 148</td>
</tr>
<tr>
<td>Grand total <strong>ASSETS</strong></td>
<td><strong>6 269 441</strong></td>
<td><strong>932 824</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>2015</strong></th>
<th><strong>2014</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LIABILITIES</strong></td>
<td><strong>2015</strong></td>
<td><strong>2014</strong></td>
</tr>
<tr>
<td>Total association funds and reserves</td>
<td>2 570 808</td>
<td>2 283 449</td>
</tr>
<tr>
<td>Result of the year</td>
<td>244 014</td>
<td>287 362</td>
</tr>
<tr>
<td>Subsidies of long-term investments</td>
<td>847 075</td>
<td>878 664</td>
</tr>
<tr>
<td>Total contingencies and loss provisions</td>
<td>360 417</td>
<td>315 627</td>
</tr>
<tr>
<td>Total dedicated funds</td>
<td>108 268</td>
<td>108 265</td>
</tr>
<tr>
<td>Total debts and liabilities</td>
<td>1 206 035</td>
<td>1 121 554</td>
</tr>
<tr>
<td>Grand total <strong>LIABILITIES</strong></td>
<td><strong>5 336 617</strong></td>
<td><strong>4 994 922</strong></td>
</tr>
</tbody>
</table>

Detailed financial statements are available on the IALA Website

FINANCIAL POSITION – WORLD-WIDE ACADEMY

In 2015 the IALA World-Wide Academy continued to receive very generous sponsorship from the International Foundation for Aids to Navigation (IFAN) but was also supported for the first time by equally generous sponsorship from and the Ministry of Oceans and Fisheries (MOF) of the Republic of Korea. Direct and in-kind sponsorship was also received from a number of national Members. This permitted its budget of €866,683 to be targeted primarily at its key objective of capacity building.
IALA Membership comprises a large number of national authorities, agencies, private companies and individuals involved in the provision and management of aids to navigation across the globe.

IALA Membership has four different categories. Details of these, and the global reach of IALA, are displayed in the tables and charts below:

<table>
<thead>
<tr>
<th>Membership Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>National membership is generally applied for by the national authority of a country which has the responsibility for the provision, maintenance or operation of marine aids to navigation within that country.</td>
</tr>
<tr>
<td>Industrial</td>
<td>Industrial membership is for manufacturers, distributors or consultants involved in the field of aids to navigation.</td>
</tr>
<tr>
<td>Associate</td>
<td>Associate membership is open to other services, organizations or scientific agencies involved in the field of aids to navigation.</td>
</tr>
<tr>
<td>Honorary</td>
<td>Honorary Membership may be conferred for life to an individual who is considered by IALA Council to have made an important contribution to the work of IALA.</td>
</tr>
</tbody>
</table>

The membership continues to grow steadily, up by 5% from 2014. The table and chart below illustrate the growth of IALA membership over the past 15 years.
IALA NATIONAL MEMBERS IN THE WORLD in December 2015

Countries in which IALA has national members
Countries in which IALA has no national member
78 National Members, 118 industrial members, 56 associate members

Events

WORKSHOP AND SEMINAR

Workshop on Human Factors and Ergonomics in VTS - The Workshop (12 - 16 October, Gothenburg, Sweden) provided an opportunity to focus on key themes associated with human factors and ergonomics with the expertise and experience of delegates to provide and develop strategies, concepts and examples of best practice to assist in the formulation of a new IALA Guideline on Human Factors and Ergonomics in the VTS.

Seminar on Maritime Digital Infrastructure and Testbeds - The Seminar (30 November – 3 December, Gothenburg, Sweden) explored the development and deployment of maritime digital infrastructures and related testbeds, with the aim of forming a basis for a future introduction of e-Navigation services and solutions.

OTHER EVENTS

e-Navigation Underway Conference took place in January in Scandinavia, and IALA supported e-Navigation Underway North-America Conference that was held in September in New York.

IMO World Maritime Day Celebration - A half day event on Monday, 19th October 2015 took place at IALA HQ during VTS Committee meeting to celebrate IMO World Maritime Day, the theme of which was Maritime Education and Training for 2015.
CHANGE OF STATUS PROJECT

ACHIEVING STATUS AS AN INTERGOVERNMENTAL ORGANIZATION THROUGH A NEW IALA CONVENTION

At its XIIth session held in A Coruña, Spain in May 2014, the IALA General Assembly adopted a resolution stating its firm belief that status as an Intergovernmental Organization (IGO) will best facilitate IALA’s aims in the 21st century and determining that the new status should be achieved, as soon as possible, through the development of an international treaty instrument (GA Resolution A.01 of 27 May 2014).

The envisaged new “Convention on the International Organization for Marine Aids to Navigation” (“IALA Convention”) will meet the requirements of the Vienna Convention for International Treaties and supersede, upon fulfilment of agreed entry-into-force requirements, the present IALA Constitution. It will be presented for adoption at a future diplomatic conference to be convened under the auspices of IALA. Upon adoption, it will be open for signature by all member States of the UN.

SMOOTH TRANSITION

The draft IALA Convention foresees in robust arrangements for a smooth transition. These will ensure that the activities of IALA’s organs and its technical work in the area of marine aids to navigation will continue uninterrupted and that its responsibilities towards the maritime community will be undiminished and maintained with the customary high level of commitment and expertise. The change of status will mark a major milestone in the life of IALA. However, it will not, in any way, change IALA’s principal aim, which is, as stated in its present Constitution, “to foster the safe, economic and efficient movement of vessels”. Under the new Convention, IALA will also remain a consultative technical organization.

STRENGTHENING INTERNATIONAL COOPERATION

IALA has worked in close partnership with other international organizations for decades and wishes this collaboration to continue and grow. Elevating IALA’s status to that of an IGO will make it a peer to organizations like the IMO, the International Telecommunication Union (ITU), the World Meteorological Organization (WMO) and the International Hydrographic Organization (IHO), thereby strengthening existing cooperation. Furthermore, it will allow for a broader participation in IALA by States, at government level. This will assist IALA’s aim to promote the greatest possible uniformity in aids to navigation, in the spirit of the SOLAS Convention.
Further in this regard, IALA is mindful of the United Nations Convention on the Law of the Sea (UNCLOS), which, under Article 266, requires States that are Parties to UNCLOS to cooperate “through competent international organizations” to promote the development and transfer of marine technology. IALA is already fully engaged with, and will continue to be dedicated to promoting technical cooperation on all matters related to the development and transfer of expertise and technology in relation to marine aids to navigation. In this context, it is committed to keeping pace with emerging technologies, as appropriate, and working closely together with its Industrial Members around the world, as well as with national government agencies and marine aids to navigation authorities and other international and intergovernmental organizations.

IALA’s objectives and activities as an IGO will continue to be complementary to those of its peer IGOs. By working together as partner IGOs - with the respective mandate, role, and responsibilities of each transparent, mutually supportive, and commonly accepted - they will work more effectively through better coordination and greater integration of standards. Any overlap or duplication would also be easier to avoid and the resulting creation of synergies would optimize available resources in the interests of the efficient movement of vessels, expeditious shipping traffic, maritime safety and protection of the environment.

THE DRAFT IALA CONVENTION

The draft IALA Convention has been developed drawing on the principles and provisions of the present IALA Constitution and those of the conventions of sister organizations such as ITU, WMO and IHO. As regards the position of Industrial Members, the draft IALA Convention follows the approach of the Convention of the World Tourism Organization (UNTWO), which designates companies involved in the business of promoting tourism as Affiliate Members to ensure their inclusion as an important category of its membership. IALA’s Industrial Members will thus be Affiliate Members of IALA as an IGO and this will ensure the continued, strong cohesion between aids to navigation authorities and providers that has always been important for the work of IALA.

The draft IALA Convention was finalized by the IALA Council at its 61st session held in Dakar, Senegal in December 2015. It is the result of two years of work involving consultations with National Members, input from a Working Group established by the IALA Council, as well as detailed advice from IALA’s Legal Advisory Panel supported by independent legal expertise from outside IALA, as appropriate. The development of a set of new General Regulations, including financial regulations, is well advanced and their approval by the Council is envisaged during 2016. Meanwhile, the draft Headquarters Agreement needs to be finalized in cooperation with France’s Ministry of Foreign Affairs.

The Government of the Republic of Korea has kindly offered to host, if appropriate, a Diplomatic Conference for formal adoption of the draft IALA Convention, which would be convened in conjunction with the next scheduled IALA Conference, to be held in Incheon in May 2018.

CONCLUSION

IALA firmly believes that IGO status will best support IALA’s aims and activities into the future. It will benefit the Contracting Parties and Members, other International Organizations and their Member States, as well as the shipping industry by continuous improvement and enhanced harmonization of marine aids to navigation and related services to the benefit of safety of navigation, efficiency of shipping traffic and protection of the environment. The envisaged new IALA Convention will provide a fit-for-purpose international legal framework that ensures transparency and good governance, strengthens IALA’s positions to work in close collaboration with Governments and other IGOs, and fosters its technical and consultative work as the leading international expert body concerned with marine aids to navigation and related services.
INDUSTRIAL MEMBERS COMMITTEE (IMC)

The industrial members form an integral part of the IALA family, this is where industry can provide knowledge and experience to IALA.

The number of IALA industrial members is now over 100 and many support the numerous working groups providing input and knowledge at a high technical level to the various Recommendations and Guidelines published by IALA. Industrial members not only support the working groups but take part in many other IALA activities including Symposiums, Seminars, specific Workshops and the IALA Conference.

Industrial members interact with each other to help ensure their products are reliable, durable and conform to the latest IALA publications.

The industrial members form an important link between manufacturers and users to ensure safe, efficient and economic movement of vessels through improvement of Aids to Navigation world-wide for the benefit of the marine community and the protection of the environment.

There is also an Industrial Members Committee (IMC), which represents the interests of the industrial members to IALA and the IALA Council. In addition the IMC is involved in arranging or assisting in a number of exhibitions, including the IALA Conference and the famous “Industrial Members Evening”.

The IMC is elected for a period of four years at the Industrial Member’s General Meeting held during an IALA Conference. The IMC currently at work was elected in 2014 and consists of:

- Mr Young K Bang, Daekee Marine Corporation, President
- Mr Steve J Nell, Marine Data Solutions, Vice President and Member at Large
- Mr Clive W Quickenden, Tideland Signal Corporation, Secretary, Treasurer, America representative and IALA Council Observer
- Mr Lars Mansner, Sabik, Europe, Africa and IMC representative at IALA Policy Advisory Panel
- Mr Noboru Maruoka, Zeni Lite Buoy Co., Ltd., Asia and Oceania representative
- Mr John Sugarman, Australian Maritime Systems, Member at Large and IALA Council Observer.

The IMC meets regularly and also has two representatives who attend the IALA Council meetings twice each year.

In the coming months a great deal of preparation work is being carried out to arrange the IALA Conference in the Republic of Korea in 2018. Venues have been visited and approved for the Industrial Member’s Exhibition and also the Industrial Member’s Evening.
To achieve its objectives, IALA cooperates with a number of international bodies, both inter-governmental and non-governmental and has established MoUs with a number of them.

IALA ESTABLISHED A MoU WITH:

- 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)

IALA ALSO WORKS IN CLOSE CO-OPERATION WITH:

- International Maritime Organization (IMO)
- International Telecommunications 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)
- Inter-governmental Oceanographic Commission (IOC)
- Radio Technical Commission for Maritime Service (RTCM)
- World Meteorological Organization (WMO)