International Association of Marine Aids to Navigation and Lighthouse Authorities

# Presentation of IALA and the World-Wide Academy

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# About IALA

International Association of Marine Aids to Navigation and Lighthouse Authorities

# The Maritime Buoyage Agreement

IALA A and IALA B

During the IALA conference in November 1980 two navigation marking systems, i.e. the System A (red color for the left hand of the ship) and the System B (red color for the right hand of the ship), were combined into one - the IALA System.

# Headquarters

St. Germain-en-Laye, near Paris, is the home base of IALA providing:

- Offices of the permanent secretariat and

- IT-equipped meeting rooms for technical committees, workshops and seminars

# A Brief History of IALA

- Technical lighthouse conferences had been convened since 1929

- IALA was formed in 1957 as a technical association based in Paris to support the goals of those earlier conferences

- The organisation has a consultative, recommendatory, and technical nature and is a not-for-profit and non political international association with Non-Governmental Organisation status

# Aids to Navigation

IALA Constitution Art. 1

"A device, system or service, external to vessels, designed and operated to enhance safe and efficient navigation of individual vessels and/or vessel traffic"

# The IALA "Motto" and principal aims

"Successful voyages, sustainable planet"

- To harmonise standards for Aids to Navigation systems worldwide

- To facilitate the safe and efficient movement of shipping

- To enhance the protection of the marine environment

# Four Types of Membership

- 83 National Members (Coastal States)
- 59 Associated Members
- 130 Industrial Members
- 47 Honorary Members

# Governance structure

- General Assembly meets every 4 years (next 2018)

- Council (24 members) meets biannually

- Council Working Groups:

  - Strategy Group
  - Finance and Audit Committee
  - Policy Advisory Panel
  - Legal Advisory Panel

# The Committees

The "Power House" of IALA

- AtoN Requirements and Management (ARM)
- Engineering and Sustainability (ENG)
- Vessel Traffic Services (VTS)
- e-Navigation (ENAV)

# Publications
Main result of the Committees work

- **<u>Standards</u>** which can be referred to directly in IMO and other Conventions and national maritime laws

- **<u>Recommendations</u>** advise what should be done

- **<u>Guidelines</u>** advise how to implement the recommendations as "best practice"

- **<u>Manuals</u>** (NAVGUIDE; MBS; VTS Guide; IALA Dictionary)

- **<u>Model courses</u>** which provide guidance on the training of VTS personnel; Aids to Navigation Managers and Aids to Navigation Technicians.

# Core Activities

- To bring together AtoN experts from around the world to enable them to exchange and compare their experiences and achievements in technical committees and working groups

- To develop common best practice standards in the form of Recommendations and Guidelines to ensure that mariners have AtoN which will meet their needs both now and in the future

- To encourages cooperation between nations to assist developing countries in establishing AtoN networks based on the degree of risk for the waterway concerned

- To contribute to a reduction in marine accidents; increased safety of life and property at sea and the protection of the marine environment
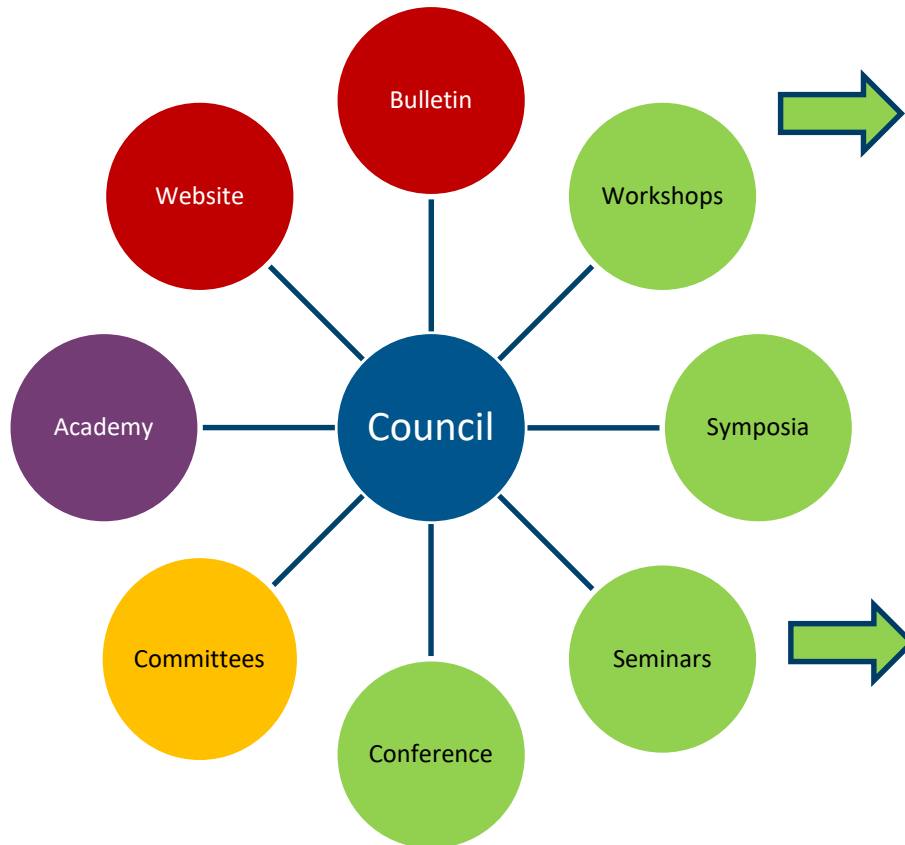
# Organization

Three Pillars

- Policy and Technical Operations
- Administration and Finance
- The World-Wide Academy

# The IALA Toolbox

Bulletin

Website

Workshops

Academy

Council

Symposia

Committees

Seminars

Conference

Workshops of technical experts in a specific subject generate draft Guidelines and/or enable new skills to be acquired

Seminars allow sharing of information and experiences for specialists through presentation of papers on a specific topic with discussion sessions

# Strategic Vision and Goals for 2026

Goal 1

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

Goal 2

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.

# The World-Wide Academy

## Training and capacity building

# The Academy

- Inaugurated January 2012
- Independently funded

*Functions:*
- *Capacity Building*
- *Education and training*
- *Research and development*

# Strategic Objectives

Focus is on the second Goal set out in IALA's strategic vision:

- *that 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.*

WWA Main Strategic Objectives:

- Focus on those with greatest need
- Review of progress within Target States
- At least one training hub in each region
- Delivering as One
- Connecting people

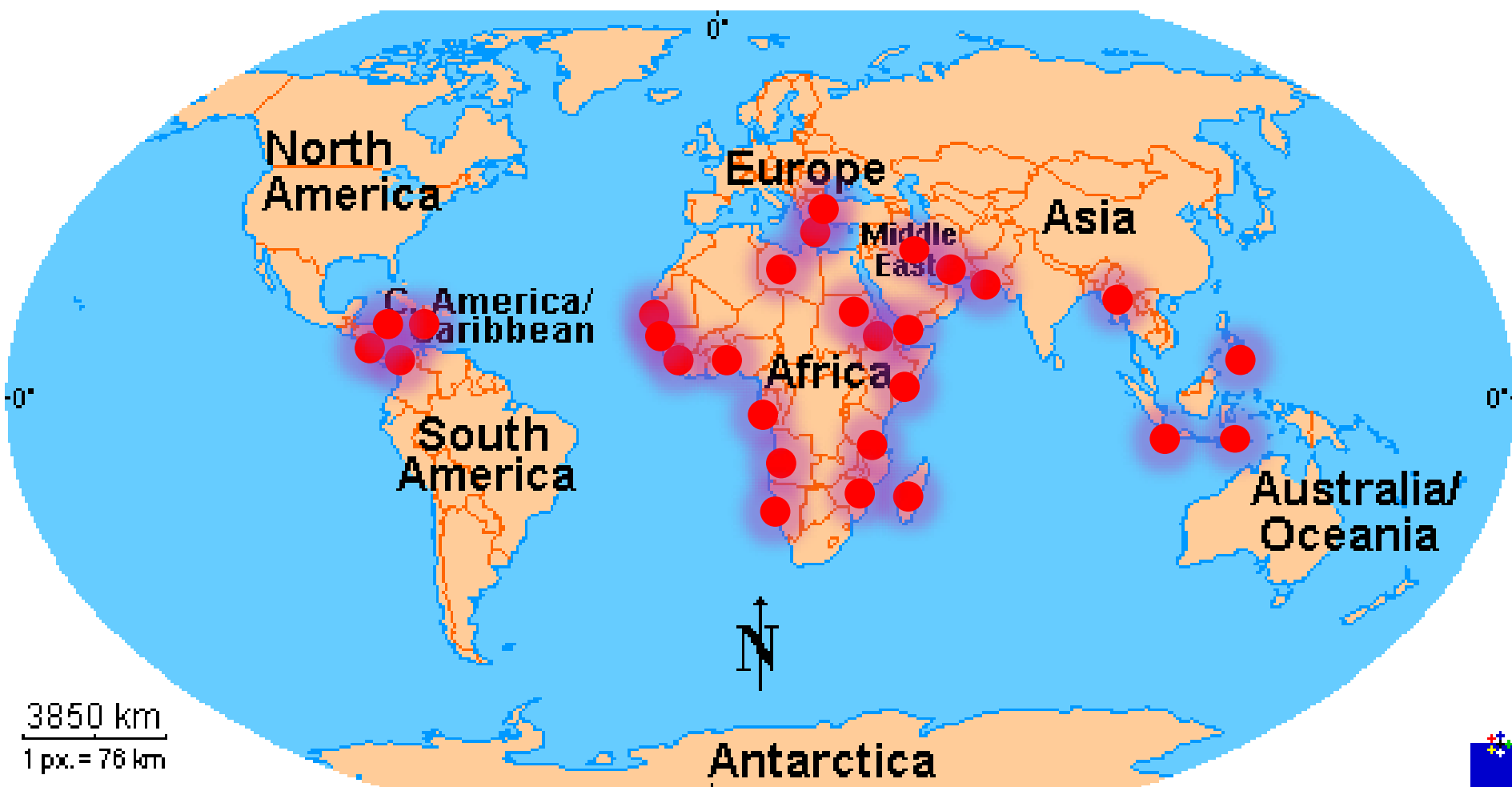# Assessment of Need - 154 Coastal States
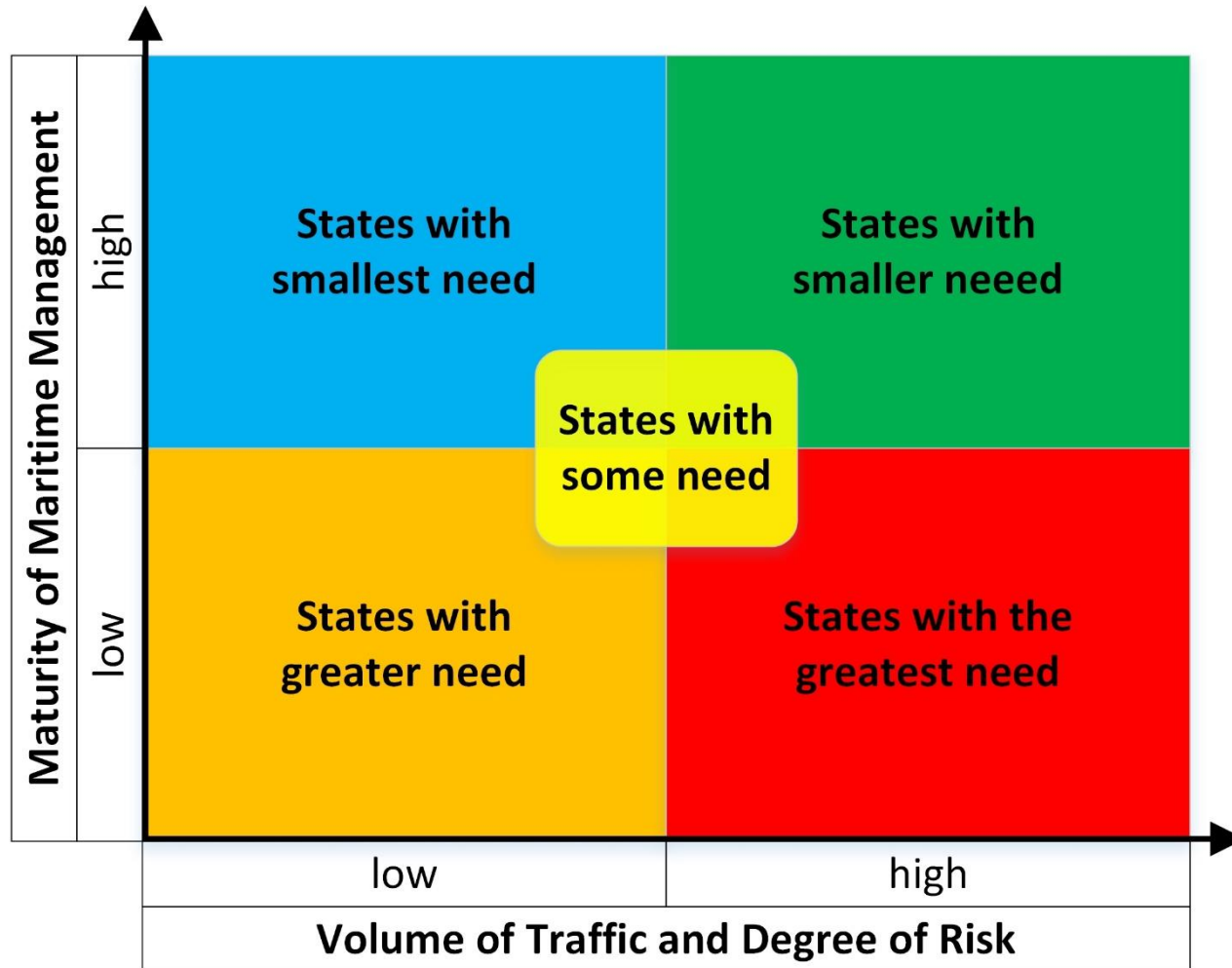
# States in need (2017)

| Degree of Need | Continental Regions | | | | | Total |
|---|---|---|---|---|---|---|
| | **Africa** | **Europe** | **Asia** | **Pacific** | **Americas** | |
| Smallest need | 1 | 12 | 7 | 1 | 6 | **27** |
| Smaller need | 10 | 16 | 13 | 8 | 13 | **60** |
| Some need | 5 | 2 | 3 | 2 | 5 | **18** |
| Greater need | 7 | 1 | 2 | 5 | 7 | **22** |
| Greatest Need | 15 | 2 | 7 | 0 | 4 | **28** |

# Those in greatest need

# Planned Missions 2017

## Need Assessment missions:

- Trinidad & Tobago
- Jordan
- Togo
- St Vincent & Grenadines
- Georgia
- Tonga
- Sudan
- Guatemala
- Tuvalu
- Mauritania
- Myanmar
- Belize

## Review missions:

- Mauritius
- Benin
- Cape Verde
- Cambodia
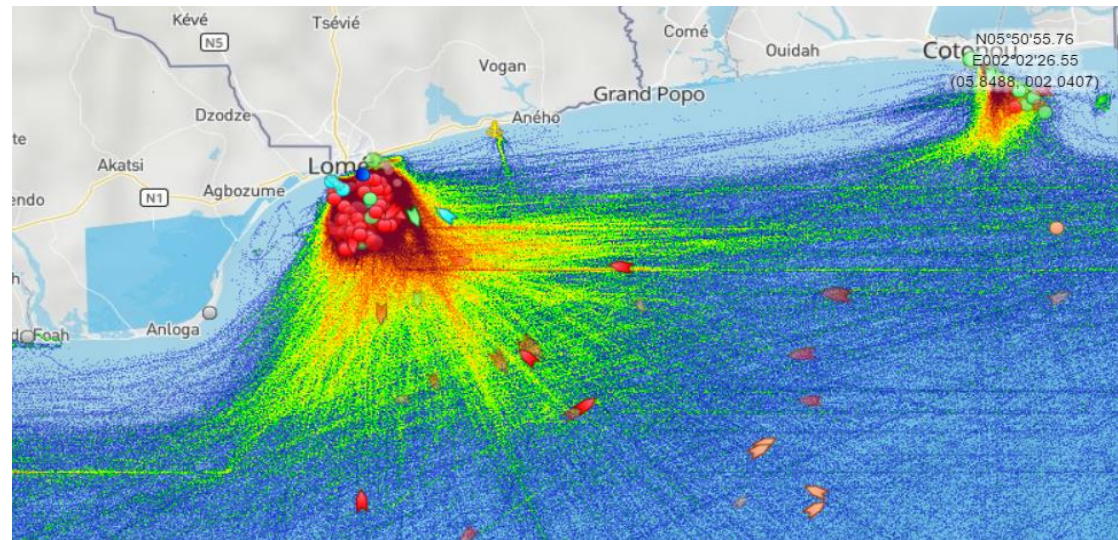
# Lobbying States in the need

- Regional Hydrographic Commissions

- Regional Maritime fora (APHoMSA etc.)

- IMO Committees (MSC, NCRC, TC etc.)

- Joint Capacity Building (UN)

# Delivering as one

# Planned AtoN Manager Courses 2017

**Full AtoN Courses (4 weeks):**

- Morocco
- Korea
- Surinam
- South Africa
- China
- France

**Module 3 only (1 week):**

- Canada
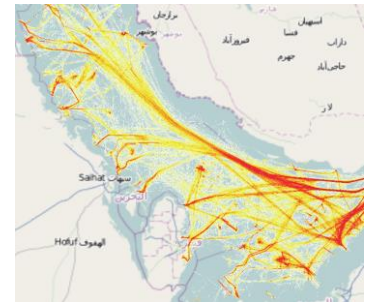- France (HQ)

# Distance learning

- For IALA Members only

- Up to 15 participants

- Once or twice a year

- e-Learning platform

# Academy Training Activities 2017

- Regional Risk Management Workshop
  St. Kitts and Nevis, April

- International ENAV-GNSS Seminar
  France (HQ), May

- Regional ENAV-GNSS & AtoN Seminar
  India, May

- International Risk Management Course
  China, September

# IALA Accreditation Scheme

- IALA Model Courses

- National Authorities perform audit and accreditation

- Accredited Training Organizations deliver courses

- Use of IALA Logo if IALA Model Courses are used

- IALA monitors to ensure consistent quality

# Connecting People

- Three Alumni gatherings (India, China and Cuba)

- One ATO Seminar (HQ)

- Social Networking

# Research and Development

- Advance the frontiers of knowledge and facilitate R&D within the scope of IALA

- IALA Committees – Knowledge and research needs

- Liaise with maritime universities world-wide

- Encourage research and development of specific topics

- Publish the list of topics

# The IALA World-Wide Academy Team
## Jacques, Gerardine, Omar and Stephen

# The Future

From a Non-Governmental Organization to an Intergovernmental Organization

# IALA's cooperation with other international organizations

Particular status or Memorandum of Understanding (MoU)

Consultative Status



MoU

# IALA's future as an IGO

A major step in the evolution of IALA

- In May 2014 the IALA General Assembly passed a Resolution supporting the change of from that of a NGO to that of an international intergovernmental organization (IGO) - a major step in the evolution of IALA
- The Government of France has commenced diplomatic activities to inform the Governments of Member States of this proposed evolution
- A Diplomatic Conference will be convened – hopefully by 2018
- IALA's core activities will not be affected

# Advantages of IGO Status

- Increased international acceptance of Standards and existing Recommendations and Guidelines due to direct participation by Governments. Harmonization will be enriched.

- Enhanced liaison with IMO and IHO with IALA as an equal partner. Synergies between this trinity of excellence would make more efficient use of the resources available.

- Headquarters agreement with host nation will provide additional financial, operational and human resource capabilities and less bureaucratic hurdles for Members.

# CB and Training in Africa

Report on the activity since 2012

# IALA WWA activities in Africa

The IALA World-Wide Academy delivers both training and capacity building activity in five key maritime regions, Africa being one of these. IALA delivers this activity in partnership with members of the Joint Capacity Building Group (principally the IMO and IHO) as part of the United Nations "Delivering As One" capacity building strategy.

IALA signed (December 2015) a Memorandum of Understanding with the Maritime Organisation for West and Centre Africa (MOWCA) covering training and capacity building and is working closely with several African and European States to deliver those actions in the most efficient and effective manner for the benefit of both inter-island and international navigational safety in African Region (France, Senegal, Côte d'Ivoire, Portugal, South Africa, Morocco, …).

# Coastal States obligations

African States, including MOWCA and SAGNEP members, should be well aware that all coastal States are obliged to provide safety of navigation services in accordance with SOLAS Chapter V.

The principal SOLAS V regulations of relevance to IALA are Regulations 4 (Navigation Warnings); 12 (Vessel Traffic Services – VTS) and 13 (Establishment and Operation of AtoN services).

Regulations 12 and 13 are based on a consideration of the volume of traffic and degree of risk in each State or region.

# IALA WWA aims

The IALA World-Wide Academy (IALA WWA) was established in 2012 to assist both developing nations and the least developed countries (IALA Target States) to recognise their international obligations related to SOLAS Regulations 4; 12 and 13 before assisting them to implement the necessary measures to provide Maritime Safety Information (MSI), VTS and AtoN services that met international standards.

For VTS and AtoN services these standards should be based on the Recommendations and Guidelines published by IALA.

# IALA WWA CB Strategy

To harmonise international capacity building, IALA adopted the four-stage capacity building process developed by the International Hydrographic Organisation (IHO).

That is to make the national Competent Authorities (CA) in its Target States aware of their obligations ("Stage 1") before encouraging them to invite the IALA WWA to conduct a technical needs assessment mission ("Stage 2") to each State.

 Such a mission, normally conducted in one working week would produce a confidential report comprising a number of recommendations which the CA would then analyse ("Stage 3") before deciding what action it would take to implement the selected recommendations ("Stage 4).

# Definitions

**Capacity Building** is: the development and strengthening of human and institutional resources. AtoN authorities in developing countries are obliged to deliver AtoN services, but sometime lack of capacity to do so. The Academy actively facilitates that process through technical missions and training events.

**Competency** is: a demonstrated availability to apply knowledge and skills.

# Definitions

**Accreditation** is: a process whereby the Competent Authority or an authority designated and approved by the CA, grants recognition to a training organisation for demonstrated ability to meet predetermined criteria for established standards. Once accreditation has been granted, the training organisation is designated as an Accredited Training Organisation (ATO).

**Approval** is: the result of completing successfully the quality assurance process under which a training course is assessed to ensure that the IALA standards are set. The Accreditation process is for the training organisation and Approved is for each training course conducted by the training organisation.
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# IALA WWA Capacity to implement the Strategy

"Stage 2" and "Stage 3 and 4" follow-up missions (now designated as Mission and Review) are conducted by the IALA WWA at no cost to States on its target list.

This is because the Academy is independently funded thanks to very generous contributions from its 2 main sponsors, the International Foundation of Aids to Navigation (IFAN) and the Republic of Korea, together with equally generous in-kind support from IALA Member States (France, …) and organisations.

# IALA WWA 2013 and 2014 CB Activities in Africa

The target list in 2012 comprised 76 countries in 7 regions.

"Stage 1" awareness missions in the first 3 years of IALA WWA's operations made 930 individuals from 50 target States aware of their obligations relating to the provision of MSI, VTS and AtoN services.

The first "Stage 2" mission was conducted in 2013; followed by 2, including Comoros in 2014 (conducted by the Dean and the IALA Senior Adviser).

A review of IALA WWA activity was conducted at the end of 2014. This resulted in a reduction of IALA target States from 76 to 69 grouped in 5 regions.

# Target States 2015 - 2016

| Regions | | 2015 | 2016 |
|---|---|---|---|
| Africa Anglophone | | 12 | 9 |
| Africa Francophone | 1 | 8 | 7 |
| Africa Lusophone | | - | 4 |
| Near East | 2 | 13 | 13 |
| Far East | 3 | 5 | 4 |
| Pacific | 4 | 12 | 11 |
| Meso America and Caribbean | 5 | 19 | 17 |
| **Total States** | | **69** | **65** |



Region 2 – Near East

Region 3 Far East

Region 5 Meso America and Caribbean

Region 1 - Africa

Region 4      Pacific

IALA World-Wide Academy Target Regions 2015
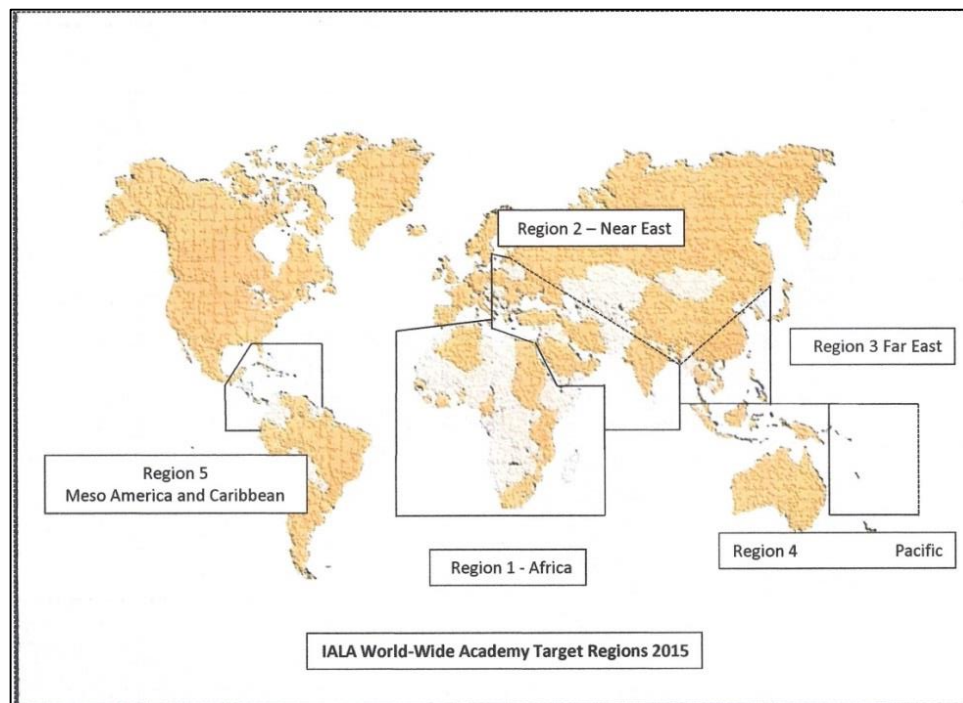
# 2017 African Target States

| | Priority 1 | Priority 2 | Priority 3 |
|---|---|---|---|
| **Africa Anglophone** | | | |
| | Eritrea | Gambia | Namibia |
| | Ghana | Liberia | Seychelles |
| | Libya | Nigeria | |
| | Sierra Leone | | |
| | Somalia | | |
| | Sudan | | |
| | Tanzania | | |
| **Africa Francophone** | | | |
| | Benin | Cameroon | Cote d'Ivoire |
| | Comoros | Gabon | Tunisia |
| | Congo (Dem. Republic) | Madagascar | |
| | Congo (Republic) | | |
| | Guinea (Republic of) | | |
| | Mauritania | | |
| **Africa Lusophone** | | | |
| | Angola | Mozambique | Sao Tome & Principe |
| | Guinea-Bissau | | |
| | | | |

**Cairo, 18 July 2017 – Presentation of IALA and IALA WWA - JM**

# Capacity Building and Training

Capacity building and training are inextricably combined.

"The successful delivery of AtoN (and VTS) services depends upon competent and experienced personnel to implement and maintain such aids" (IALA Recommendation E-141).

It is considered essential that both AtoN and VTS Authorities are provided with sufficient staff, appropriately qualified, suitably trained and capable of performing the tasks required, taking into consideration the type of AtoN and/or VTS and the level of services to be provided. IALA defines international standards for personnel in charge of both VTS and AtoN implementation and maintenance. (VTS and AtoN training standards set out in IALA Recommendation V-103 and E-141 respectively).

7/16/2017

**Cape Town, 29 August 2016 – IALA WWA CB & Training in Africa - JM
Cairo, 18 July 2017 – Presentation of IALA and IALA WWA - JM**

# Training

Training in AtoN service provision, including VTS, is vital to "the safe and efficient movement of shipping".

Both ISO 9001.6.2 and IALA place considerable emphasis on competency.

Certification of competency to international standards in both AtoN and VTS is achieved via IALA model courses.

There are four categories of VTS training and two levels for AtoN training ("Level 1" applies to AtoN managers and "Level 2" to AtoN technicians). See IALA model courses V-103/1 – V-103/4 for VTS syllabi and E-141/1; IALA WWA.L2.0 for AtoN syllabi.

# Distance Learning

First delivery of distance learning for L1 AtoN Manager Training has been organised, and under the train the trainer principle, arrangements for participation to a pilot scheme have been made with UK.

# Training delivering

Apart from an annual risk management course, IALA does not generally deliver training itself.

Rather it encourages and facilitates its National Member to accredit either regional or national training organisations to deliver approved VTS and AtoN training based on the suite of model courses published on the IALA website from which the relevant syllabi can be downloaded free of charge.

The list of current Accredited Training Organisations in the African region is on the IALA website www.ial-aism.org

7/16/2017

**Cape Town, 29 August 2016 – IALA WWA CB & Training in Africa - JM
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# Training Organisations Accreditation

IALA does not accredit training organisations or courses conducted by other authorities or academies. Only Competent Authorities of IALA National Members can accredit Training Organisations to deliver approved IALA Model Courses. The IALA WWA is available to facilitate the accreditation process if requested to do so by a Competent Authority.

See IALA Guideline 1014 and 1100 for the training and certification processes for VTS and AtoN respectively.

# Generalities – Hydrographic Conferences

Regular participation by IALA as an observer at the Hydrographic Commissions (EAtHC, NIOHC, SAIHC) meetings provided an ideal opportunity for follow-up "awareness" briefings with African States representatives.

The provision of both VTS and AtoN services should be based on a formal analysis of maritime traffic patterns and risk. The same applies to the provision of hydrographic services.

One meetings between the IALA WWA and SHOM (the French Navarea II Coordinator) explored how their technical assessments could be taken further to maximise effectiveness.

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# CB Awareness Seminars ("Stage 1")

Several Awareness Seminars has been organised in Africa, often with IMO and IHO (Cape Town-2012, Nouakchott-2013, Accra-2014, Dakar-2015).

An Awareness seminar on aids to navigation, organised by IALA WWA and the Portuguese Lighthouse Authority, dedicated to Portuguese speaking countries (Angola, Cape Verde, Guinea Bissau, Mozambique, Sao Tome & Principe, Timor Leste and Brazil) has been delivered in May 2016 in Lisbon, Portugal, on the same issues so that capacity building activity in African Portuguese speaking countries could be improved.

Morocco, with the support of IALA, has been organising (Tanger, Morocco, 25-27 May 2016) a three-day Seminar 1st "Journées Techniques Portuaires et Maritimes", allowing to deliver also awareness information.

# CB – Technical Needs Assessment Missions

2014:
Comoros

2015:
Cameroun,
Côte d'Ivoire

2016:
Liberia
Benin
Cape Verde,
Namibia

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2017:
Kenya
Togo
Sudan

Possibly:
Djibouti

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# CB - Reviews

The IALA Senior Adviser is working with Comoros, Cameroun and Togo to prepare Reviews missions.

A Review should be held in Mauritius in September 2017, back to back with SAGNEP5.

Appropriate actions to implement the recommendations made in the IALA Technical Mission report have to be taken.

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# CB - The Way Forward

This will leave 16 potential "Stage 2" missions to be completed in the African region before the end of IALA's Strategic Goal target of 2026.

It is hoped that the MOWCA and SAGNEP membership will work with IALA to encourage those States to invite the IALA WWA to conduct such missions which, it will be remembered, are free-of-charge to the Target States.

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# Accredited Training Organisations - Status

As part of its training Strategy, IALA encourages African States to accredit training organisations to deliver approved training programmes based on IALA model courses.

➤ There are in France two Accredited Training Organisations (ATOs) delivering VTS courses and one delivering AtoN courses.

➤ The IALA WWA Dean is working with the support of France (ENSM Marseille and GPM Marseille) to allow the Académie Régionale des Sciences et Techniques de la Mer (ARSTM) of Abidjan, a body part of MOWCA, to deliver operator VTS training. The aim is to organize VTS training in Africa instead of sending people to Europe.

➤ The IALA WWA Vice-Dean and the IALA Senior Adviser are supporting South Africa to accredit organisations delivering Level 1 and Level 2 AtoN training courses by 2018.

➤ Morocco has been hosting a Level 1 AtoN Manager training session, and is considering the possibility to host VTS operator sessions

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# AtoN's Accredited Training Organisations – Way Forward

When operational, the Africa region will benefit of several ATOs offering "Level 1" AtoN courses for potential AtoN managers. This should be a major achievement of considerable benefit to all coastal States in the African region.

Spain, working with IALA, facilitates the delivery of "Level 1" AtoN manager training in Spanish in 2015. It is understood that such a course may be delivered again. The IALA website (www.iala-aism.org) will advertise it once finalised.

France and Morocco will be delivering each year a « Level 1 » course, and at least four seats should be available, without scholarship fees, for French speaking African aids to Navigation Managers for each session.

# 2016 final IALA HQ "Level 1" Manager Course

Several of the larger African States have numbers of fully qualified VTS personnel but only a few AtoN managers are in possession of international certificates of competence bearing the IALA logo (one from Benin, Cameroun, Comoros, Gabon, Guinea, Madagascar, Morocco, two from Côte d'Ivoire, Kenya and South Africa).

The "Grandfather Clause" whereby Competent Authorities of IALA Member States could award such certificates to experienced personnel expired in late 2014.

As the IALA WWA has been delivering its final "Level 1" AtoN manager course in mid-2016, 8 places have been reserved for participants from countries not on the IALA target list. But there has been no participant from Africa.

# African AtoN's Certificates

According to the up-dated MOU between IALA and France National Competent Authority (Direction des Affaires Maritimes), a third three weeks "Level 1" AtoN manager courses has been held in France in 2016, allowing 5 participants from African French speaking countries (Djibouti, Gabon, Morocco, Senegal, Togo) to attend, with no scholarship fee, as 3 participants (Benin, Côte d'Ivoire, Guinea) in 2015 and 4 (Cameroon, Côte d'Ivoire, Gabon, Madagascar) in 2014. There should be 4 participants (Guinea, Madagascar, Morocco, Tunisia) attending the 2017 session. Other participants from African countries (Comoros, Kenya, South Africa) has been attending courses delivered in English.

Thereafter potential AtoN managers of Authorities and AtoN service providers who wish to gain formal certification will need to participate on one of the "Level 1" courses.

Information will be available on the IALA website (www.iala-aism.org).

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# "Level 2" Technician Courses

Even if there has been no accreditation for Level 2 training courses, France has offer, without scholarship fee, to French speaking African technicians to attend 3 Level 2 courses, in November 2016:

➢ Installation of signs and marks introduction
➢ AIS introduction
➢ French AtoN control system

7 participants have been attending  the two first courses, and 4 the third one.

A programme is under definition for 2018

# Future Possible Training Hubs

Strategy is to have at least one Accredited Training Organization in each Target Region

Some ATOs to develop as regional training hubs

IALA WWA to facilitate where requested through MOUs

| Region | VTS | AtoN |
|---|---|---|
| Africa (A)<br>Africa (F) | Abidjan<br>Casablanca | South Africa<br>Casablanca |
| Near East | Abu Dhabi | Oman |
| Far East | Malaysia<br>Singapore<br>Japan | Malaysia<br>China |
| SW Pacific | Australia | Fiji (SPC) |

# Conclusion

IALA's capacity building and training activity is delivered by the IALA World-Wide Academy; an integral, but mainly independently funded pillar of IALA. Missions and Reviews are delivered free of charge to Target States.

This could not have been achieved without the superb and generous support of its principal sponsors and in-kind contributions from its Member States and international organisations such as the IMO.

Close liaison with the IMO and IHO under the United Nations banner of "Delivering As One" and with organisations such as MOWCA and SAGNEP are facilitating the delivery of capacity building and training.

The IALA WWA came of age in 2015 and is now embarking on an ambitious programme to improve the safety of navigation in the African region. The support of established MOWCA and SAGNEP members to assist this programme is seen as key to its success.

# Recommendations

**It is recommended to NIOHC participants:**

➢ **Note this paper**

➢ **Encourage African States to work closer with MOWCA and SAGNEP**

➢ **Encourage IALA Target States in African Region to request technical needs assessment missions**

➢ **Encourage African States to join IALA, as National or Associated Members**

# QUESTIONS?

Contact: contact@iala-aism.org