



COASTAL STATES OBLIGATIONS IALA WWA WITHIN AFRICA

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SUMMARY

- IALA
- IALA Future
- IALA World-Wide Academy
- Coastal States International obligations
- Risk management
- Nautical publications and MSI
- AtoN Provision
- Delivering as one
- Coastal States in need
- Capacity Building within Africa
- Training within Africa
- Conclusion



About IALA

International Association of Marine Aids to Navigation and Lighthouse Authorities



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
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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”

(Reference: NAVGUIDE 1.8)





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
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Four Types of Membership

- 87 National Members (Coastal States)
- 68 Associated Members
- 146 Industrial Members
- 43 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)





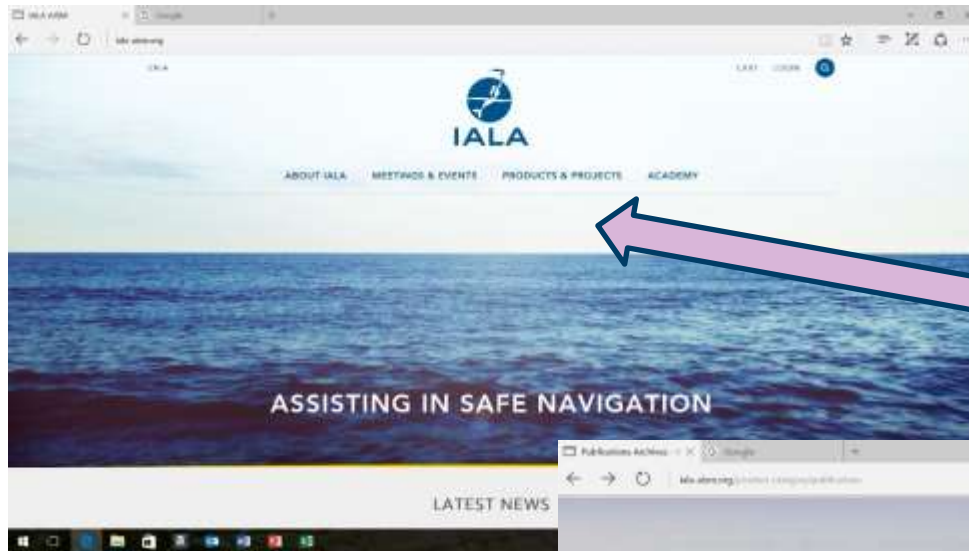
Publications

Main result of the Committees work

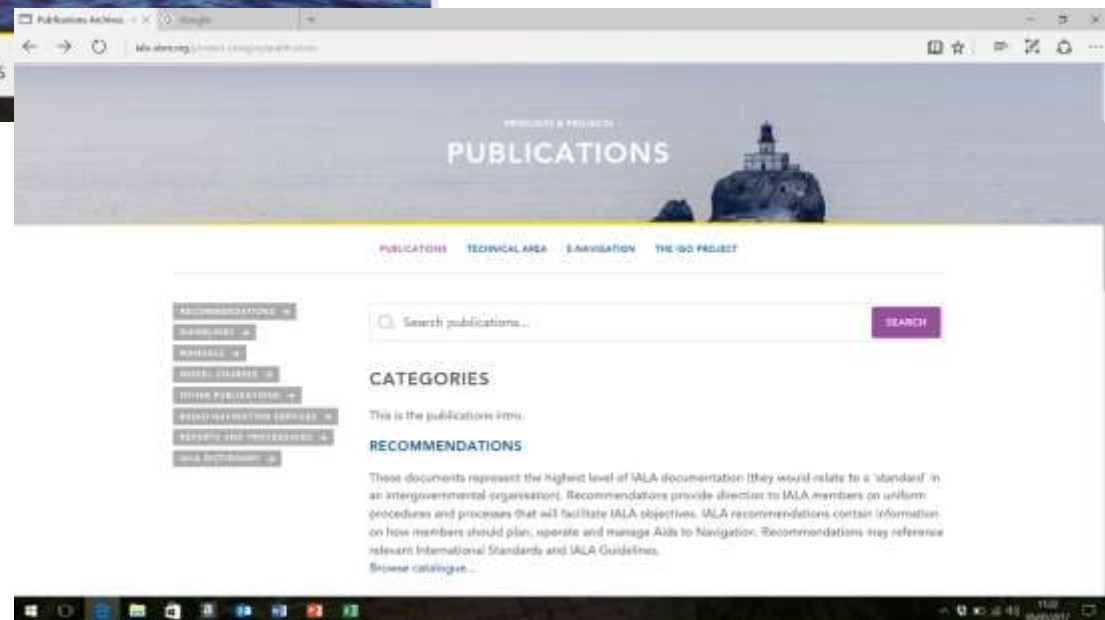
- **Standards** which can be referred to directly in IMO and other Conventions and national maritime laws
 - **Recommendations** advise what should be done
 - **Guidelines** advise how to implement the recommendations as “best practice”
 - **Manuals** (NAVGUIDE; MBS; VTS Guide; IALA Dictionary)
 - **Model courses** which provide guidance on the training of VTS personnel; Aids to Navigation Managers and Aids to Navigation Technicians.
-



IALA Website www.iala-aism.org



Select Products & Projects to download publications





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
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Organization

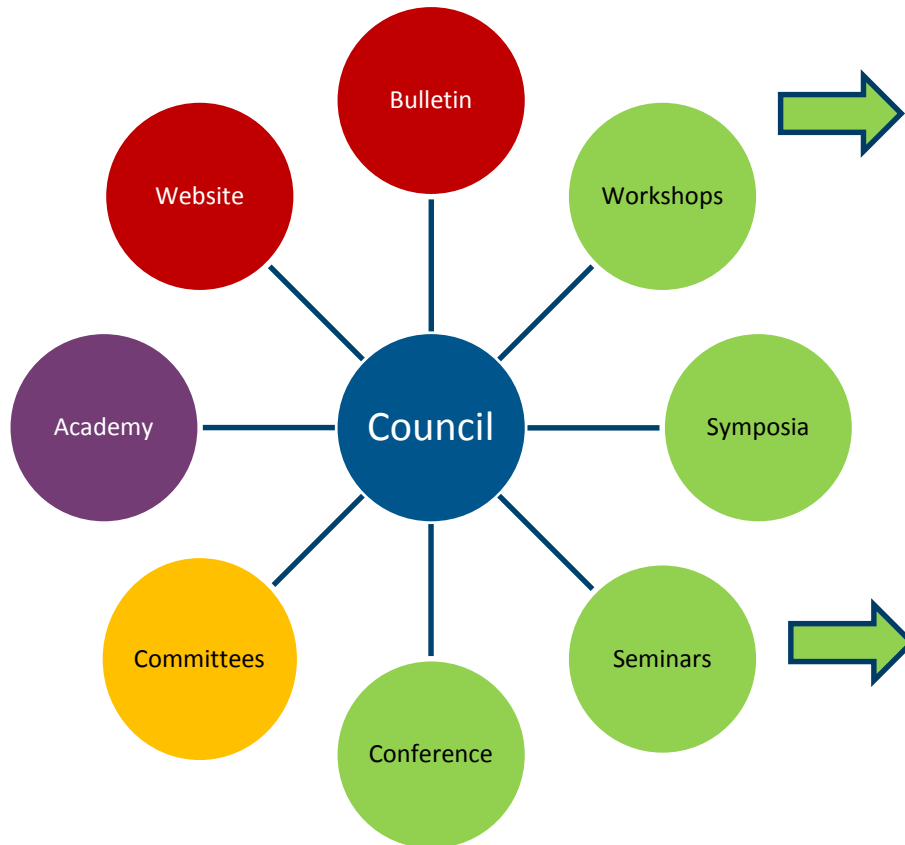
Three Pillars

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





The IALA Toolbox



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 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



The logo of the International Maritime Organization (IMO) is centered in this box. It features a blue globe with a compass rose, flanked by two crossed anchors, all enclosed within a laurel wreath. Below the emblem, the letters "IMO" are written in a bold, blue, sans-serif font.

MoU



This section displays a collection of logos for organizations that have a Memorandum of Understanding (MoU) with IALA. The logos are arranged in two rows. The top row includes the IHB Monaco logo (a yellow anchor with a red and green circle), the PIANC A.D. 1885 AIPC.N logo (a circular emblem with a ship), the CIRM logo (the letters "CIRM" in blue with a green circle), the INPA logo (a blue and red flag with "INPA" in white), and The Nautical Institute logo (a blue globe with a compass). The bottom row includes the IHMA logo (a yellow anchor with a globe), the IMSO logo (the letters "IMSO" in blue with a white knot), the African Union logo (a map of Africa with a ship), and the Pacific Community logo (a blue triangle with a white sail and the text "Pacific Community" and "Communauté du Pacifique").



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 deployed diplomatic activities to inform the Governments of Member States of this proposed evolution
 - After three Preparatory Diplomatic Conferences (Paris, Marrakesh, Istanbul), the **Diplomatic Conference for the IALA Change of Status** will be convened in Kuala Lumpur, Malaysia, 25-28 February 2020
 - 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.





Support to be delivered

IALA Members

- ✓ Angola (IHSMA, National Member)
- ✓ Comoros (APC, Associate member)
- ✓ England and Wales (THLS, National member; UKHO, Associate Member)
- ✓ France (DAM, National Member)
- ✓ Kenya (KPA, National member)
- ✓ India (DGLL, National member)
- ✓ Madagascar (APMF, National member)
- ✓ Mozambique (INAHINA, National member)
- ✓ Norway (NCA, National Member)
- ✓ Portugal (PLA, National Member)
- ✓ South Africa (Transnet, National member; SAMSA, Associate member)
- ✓ Tanzania (THA, National member)

are encouraged to:

- ✓ make contact to their Foreign Affairs Ministry
 - ✓ ensure they will attend the IALA Diplomatic Conference in KL
 - ✓ Deliver support to IALA becoming an IGO.
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Support to be delivered

Other coastal states

- Mauritius (SAIHC member)
- Seychelles (SAIHC member)
- Malawi (SAIHC Associate member)
- Namibia (SAIHC Associate member)



■ Countries in which IALA has National Members
■ Countries in which IALA has no National Member

are encouraged to:

- ✓ request IALA membership
- ✓ make contact to their foreign affairs
- ✓ ensure they will attend the IALA Diplomatic Conference in KL
- ✓ deliver support to IALA becoming an IGO



The World-Wide Academy

Training and capacity building



The Academy

- Inaugurated January 2012
- Independently funded

Functions:

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





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 objectives

They are focused on achieving the second objective of the IALA strategic vision:

All coastal States contribute to a global system of navigational aids and navigation safety services through capacity building and sharing of expertise.

Main strategic objectives of the Academy:

- ✓ Focus on those who are in greatest need
- ✓ Examine the progress made by the target states
- ✓ Have at least one training center in each region
- ✓ Implement "Delivering as One"
- ✓ Connecting people



IALA WWA CB Strategy

To harmonise international capacity building, IALA initially 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 before encouraging them to invite the IALA WWA to conduct a technical needs assessment Mission 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 before deciding what action it would take to implement the selected recommendations.

The national Competent Authority then could invite the IALA WWA to conduct a Review Mission. The two Missions are free of charge.



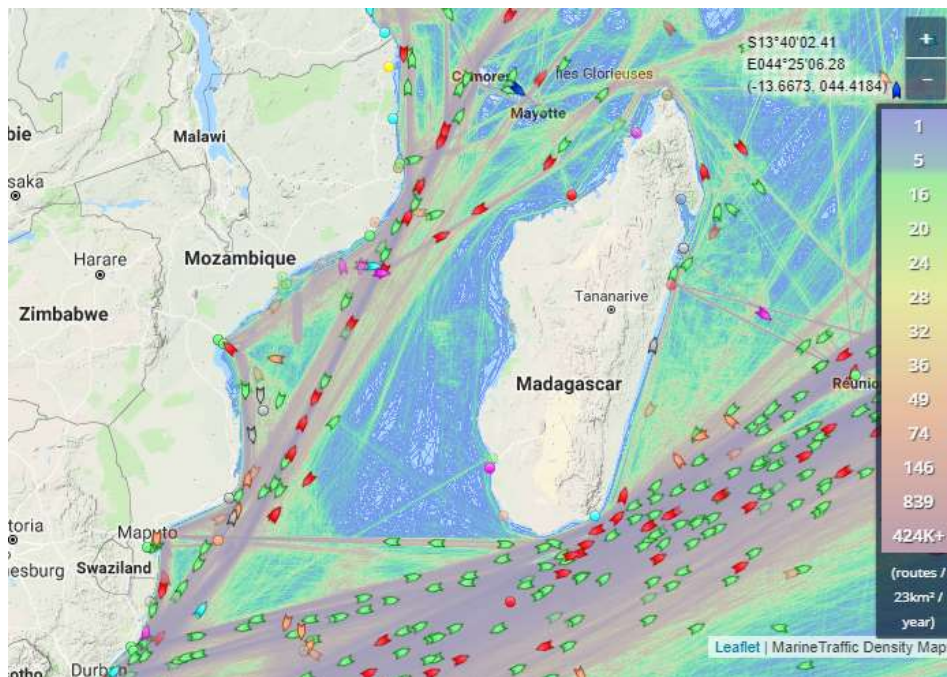
Capacity Building Strategy

Seminar



Mission

Review





IALA WWA Capacity to implement the Strategy

Missions (NAM 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 (Malaysia, Singapore, France, ...) and organisations.



Main Activities

- **Education and Training**

- *Develop and manage Accredited Training Organisations*
- *Deliver Model Courses, Seminars and Lectures*
- *Develop Model Courses together with IALA Committees*

- **Capacity Building**

- *Needs Assessment Missions, mapping the gaps*
- *Review Missions, follow-up on recommendations*
- *High Level Missions, raising awareness with decision makers*

- **Research and Development**

- *Need for AtoN research and development*
- *Harvest results for use in IALA/WWA work*

- **Sustainable funding**

- *Work with new and existing donors*





Coastal States Obligations

SOLAS Chapter V



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).

Other Key SOLAS V Regulations:

- 9 – Hydrographic Services
- 10 – Ships Routeing
- 11 – Ships Reporting Systems
- 19-2.4 – AIS



SOLAS Chapter V Regulation 13

Chapter V Regulation 13.1 requires a Contracting Government to provide “as it deems practical and necessary” by itself or with other Governments “such AtoN as the **volume of traffic justifies** and the **degree of risk requires**”.

IALA Risk Management Toolbox endorsed by IMO in SN.1/Circ.296

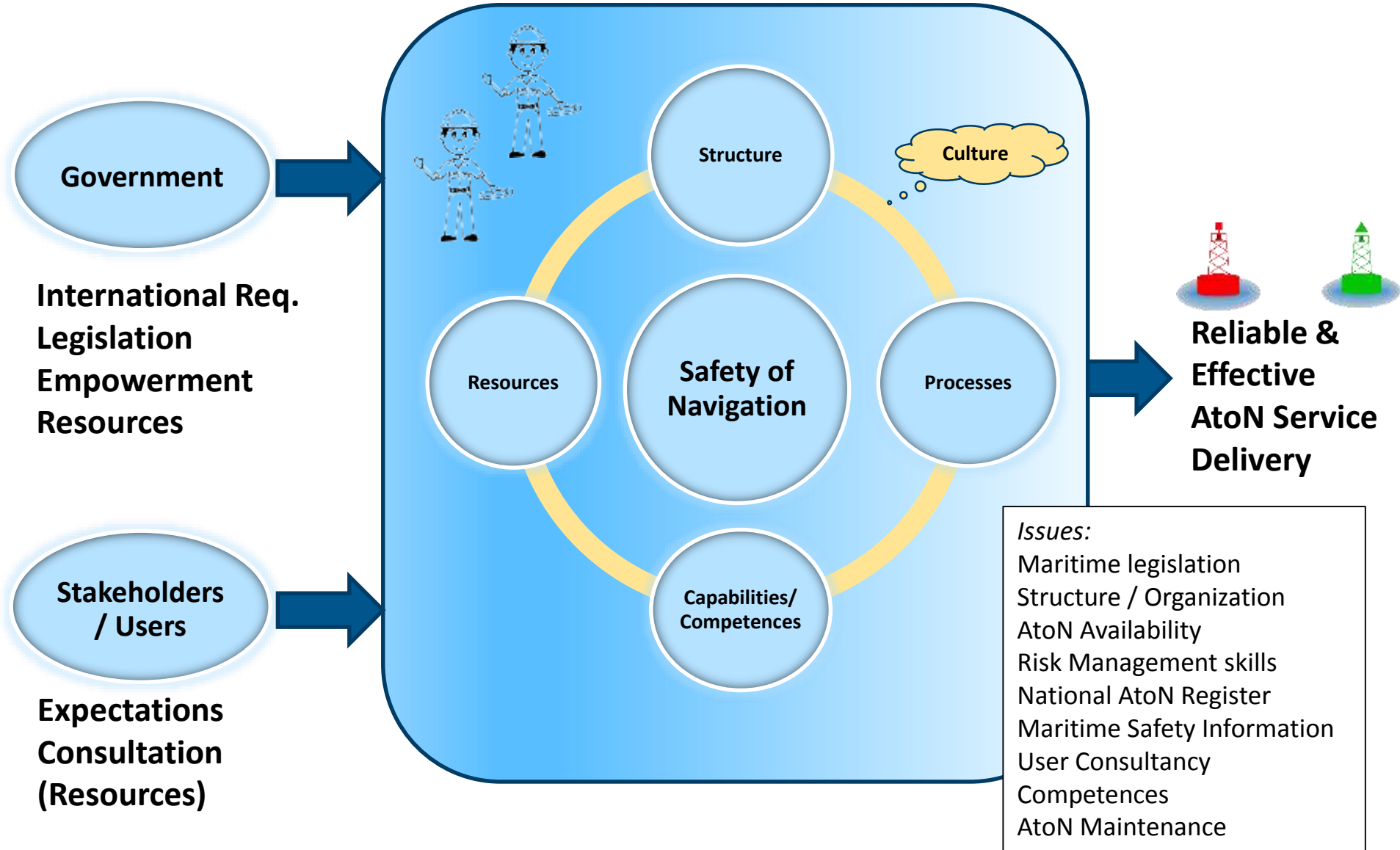
Chapter V Regulation 13.2: AtoN should conform to international standards.

IALA recommendations and guidelines

Chapter V Regulation 13.3: **information** about AtoN must be **given to all concerned** (mariners; stakeholders etc.): MSI



Competent Authority





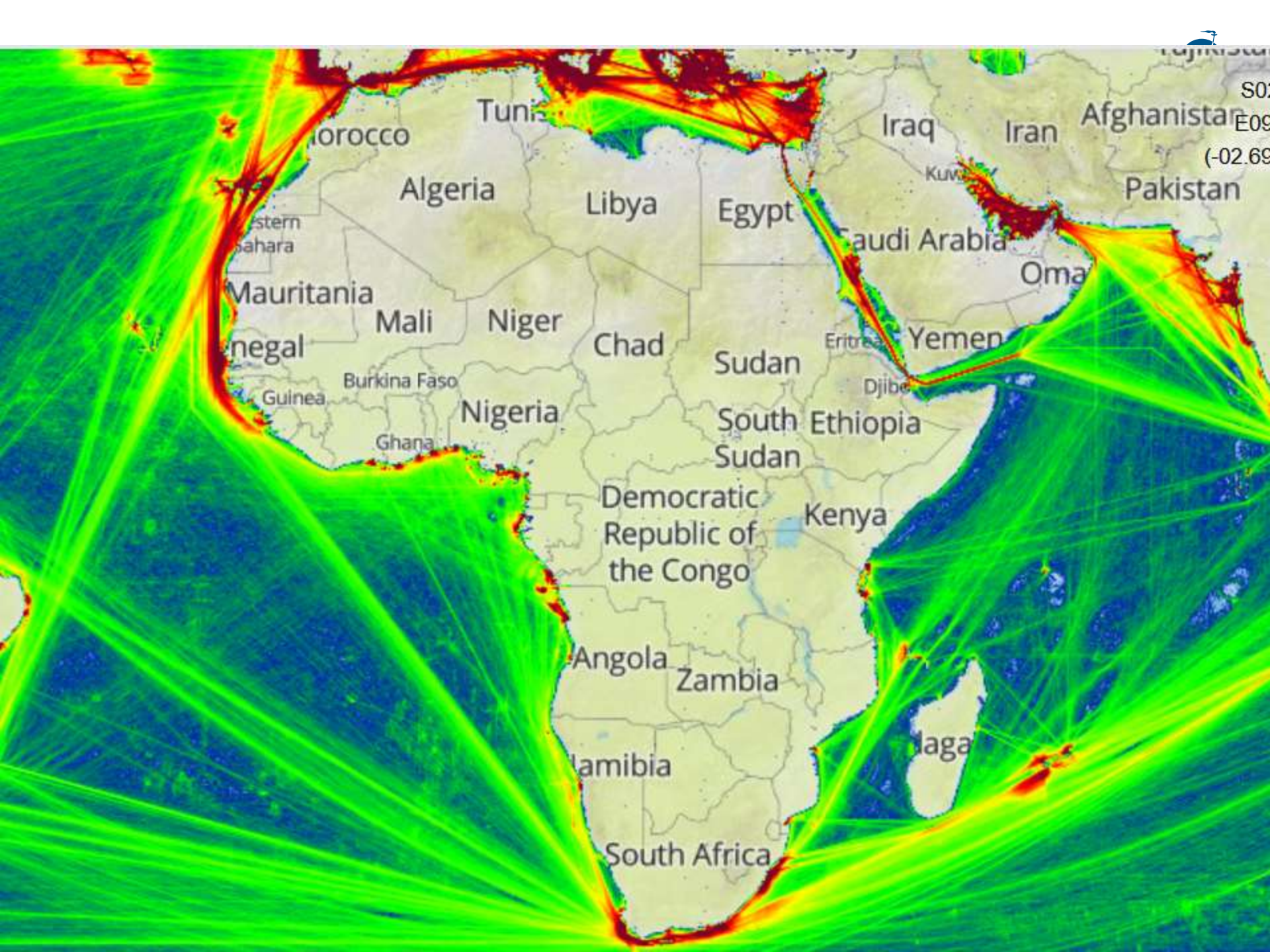
Responsibility for AtoN

- The National Competent Authority (CA) provides or formally delegates the provision of its AtoN service to States; Territories; local government; ports, harbours and waterways; military organisations or private groups.
- The geographical area of each must be defined.
- Responsibility for the AtoN service **remains** with the Government, **not** with the service provider.
- Need to ensure that national maritime law specifies which Ministry is the CA and that the CA has the right to audit all AtoN service providers.



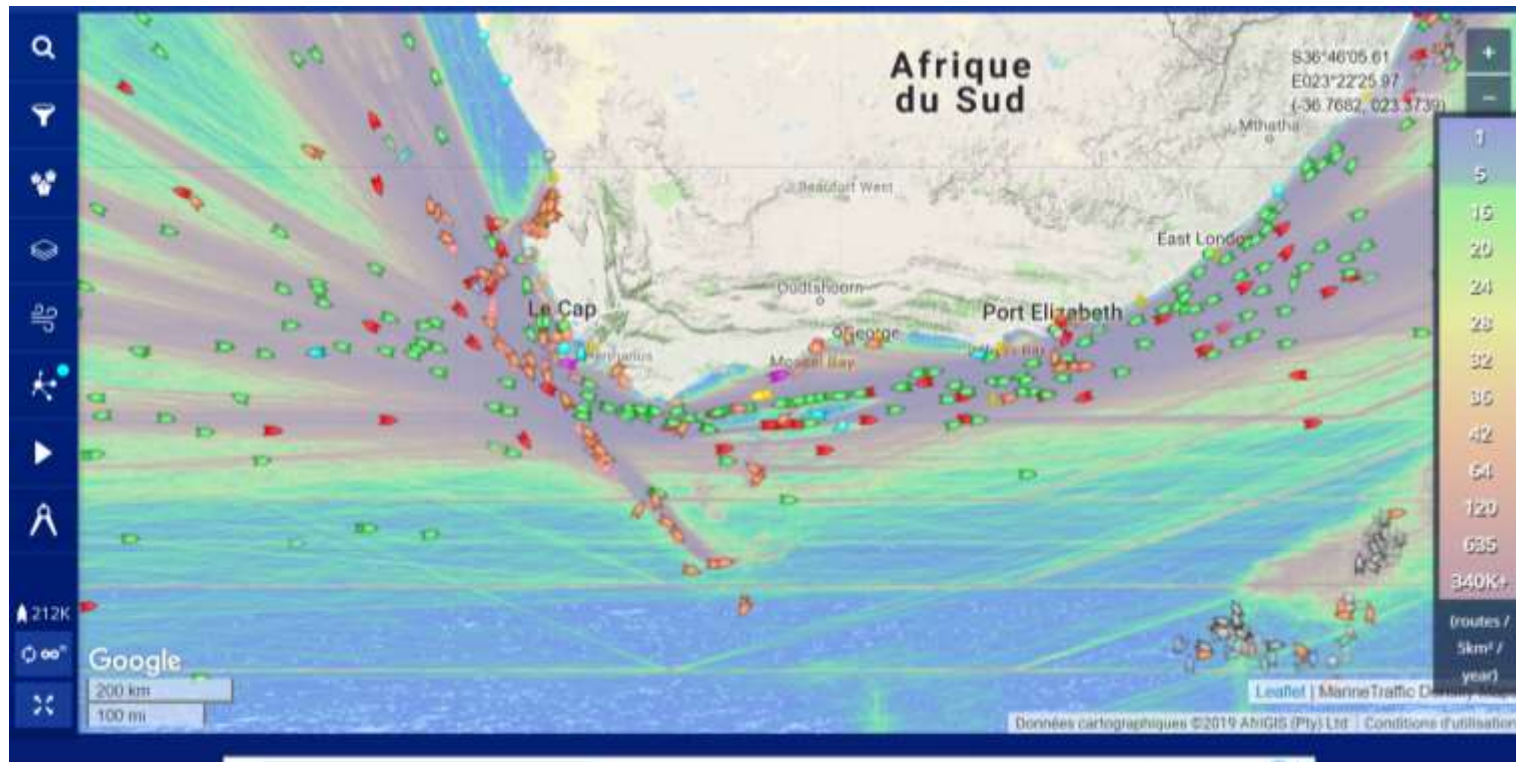
Obligations of the Competent Authority of a Contracting Government to SOLAS

- Provide as many AtoN are required based on a **risk assessment**
- Guarantee the reliability of each AtoN
- Update the AtoN service as maritime traffic, environmental patterns, technology and resources change
- Set up a formal method of informing all concerned including mariners about existing AtoN, new AtoN, and AtoN failures (charts; nautical publications; NAVTEX etc.)
- Decide who will provide the AtoN service



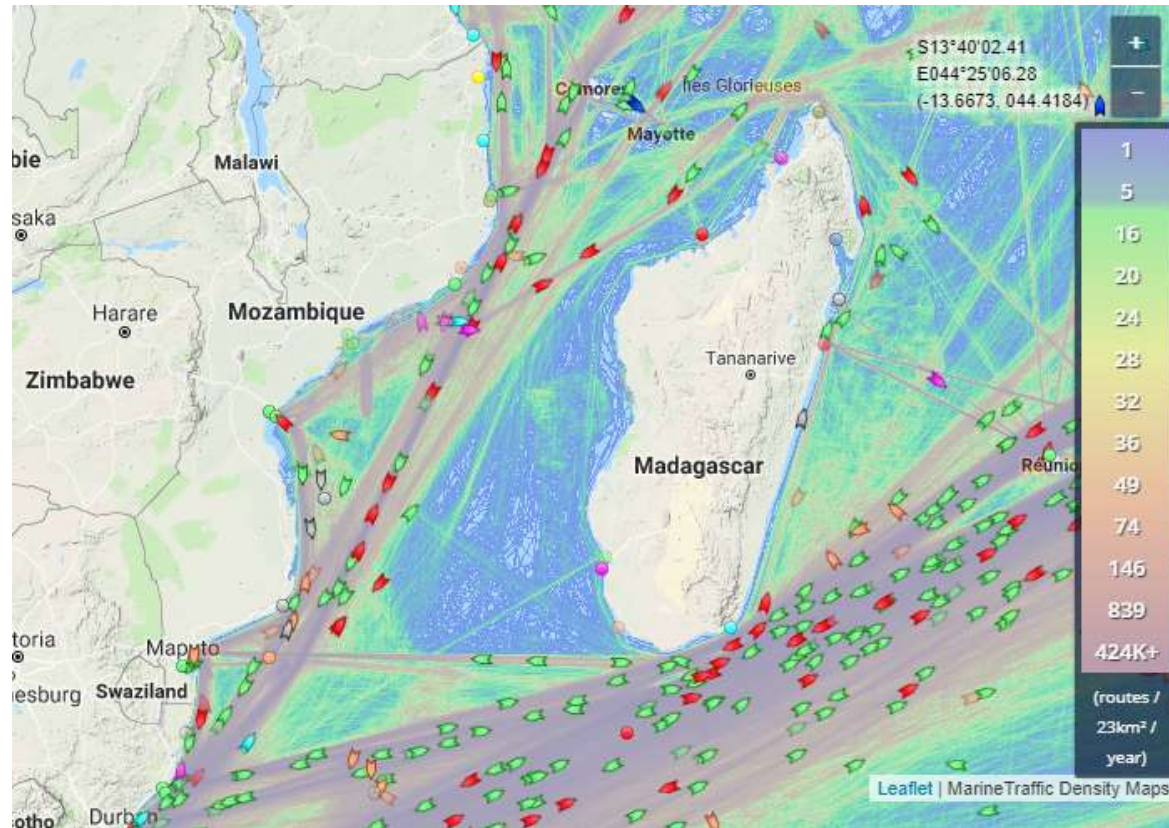


Marinetrafic.com





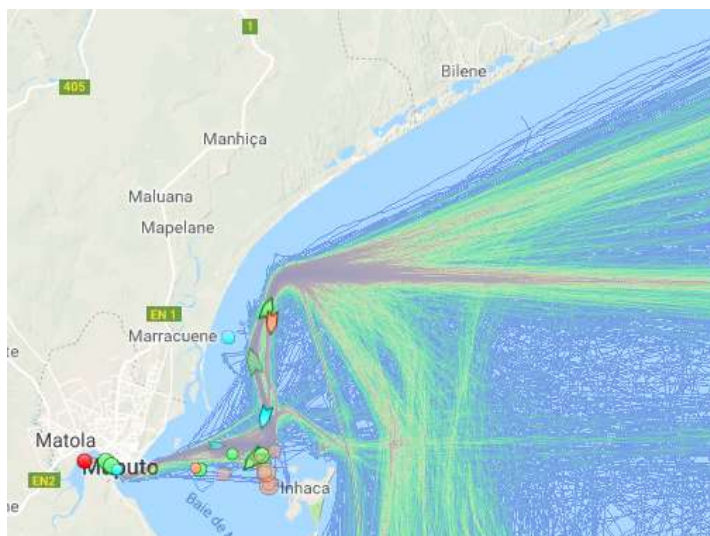
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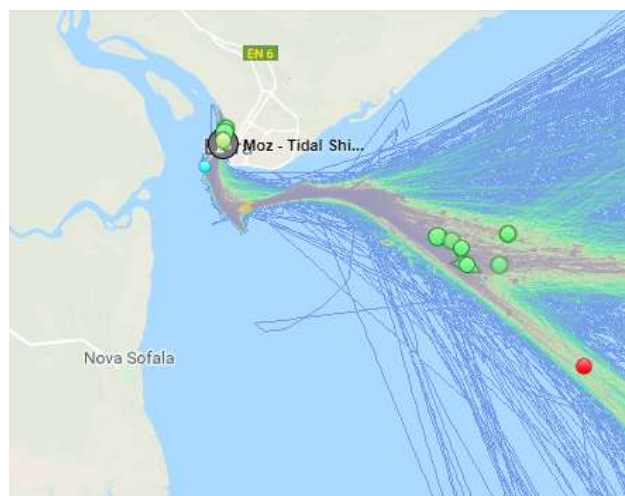


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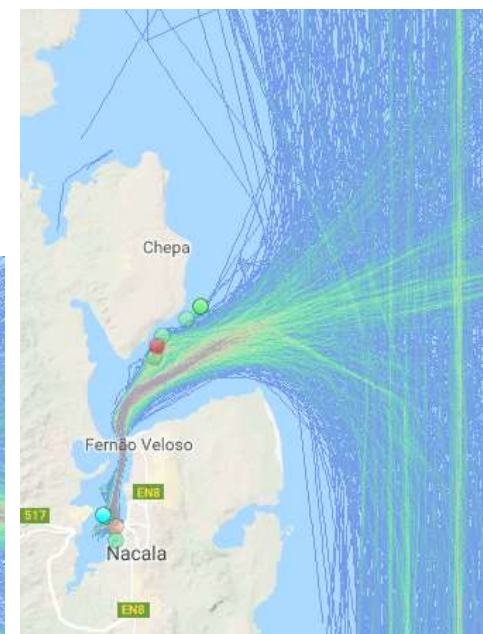
Maputo



Beira

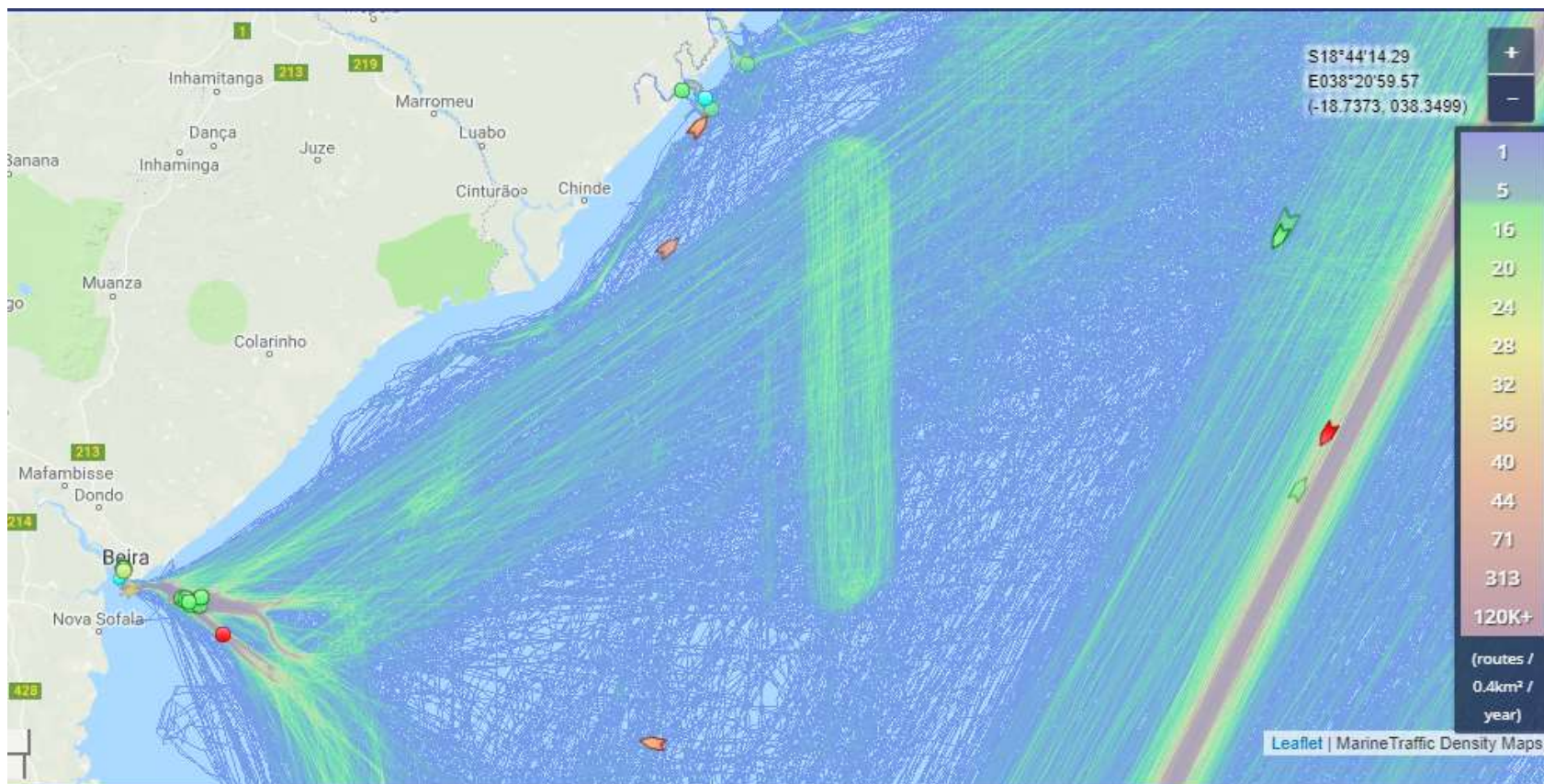


Nacala



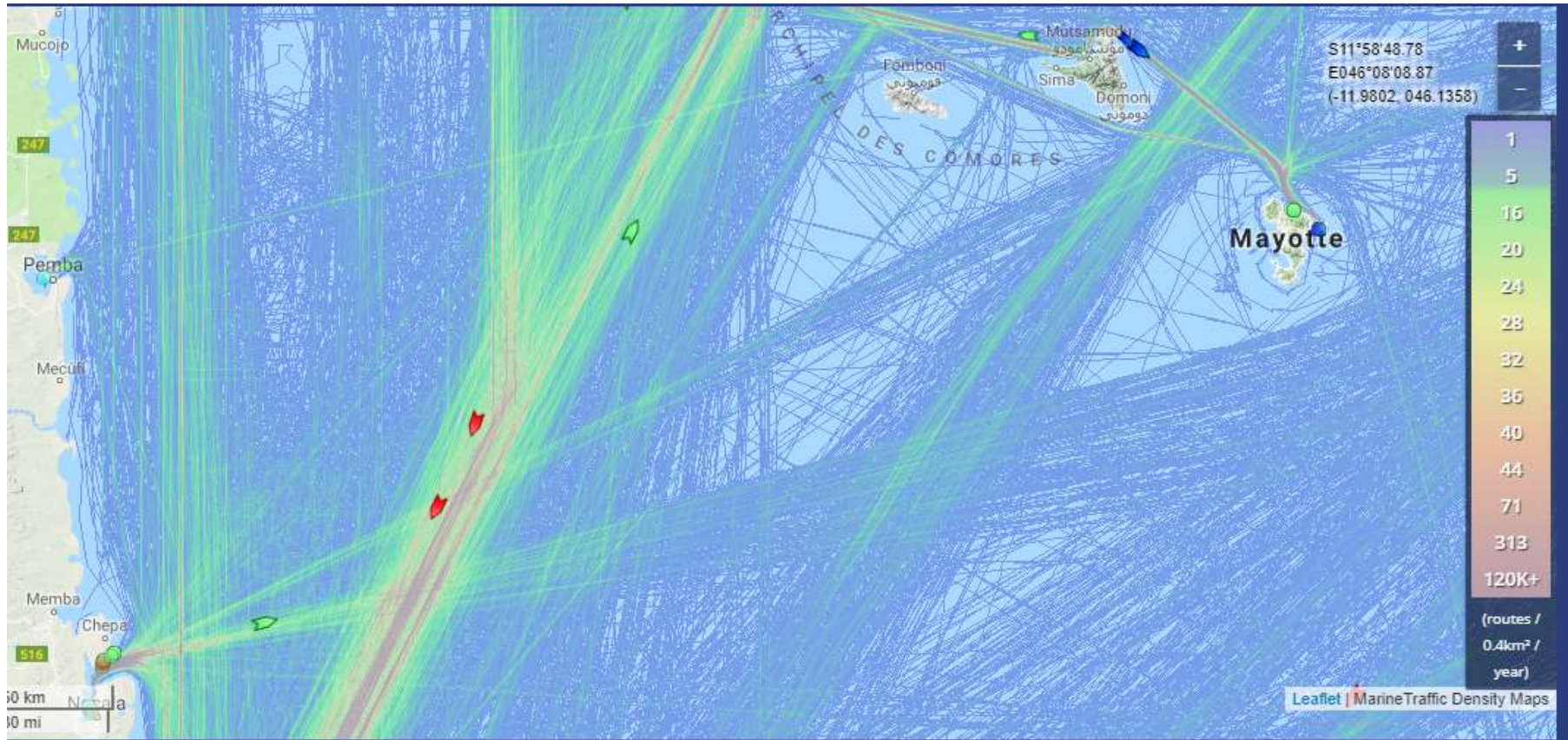


Fish vessels concentration





Routeing measures?





Risk Management

The IALA Risk Management Toolbox



Navigational Risk

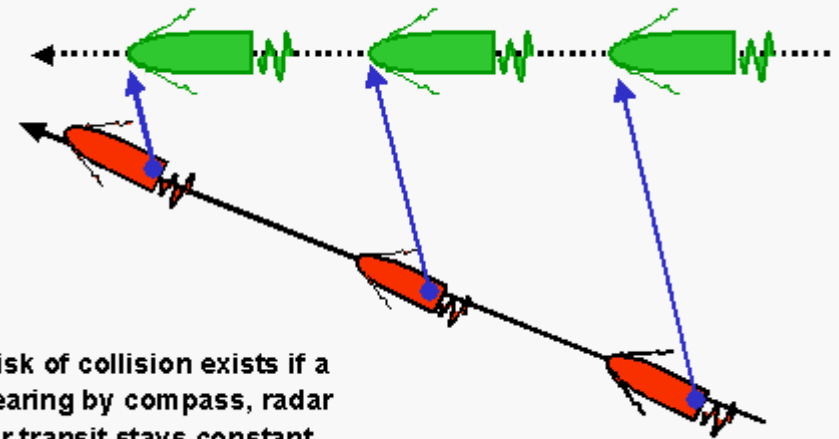
Grounding

Collision

....?



Risk of Collision





How ?

- How to measure Traffic Volume?
- How to Quantify Risk?





IALA Risk Management Toolbox



PAWSA – 30 experts

IWRAP MkII – calculates statistics

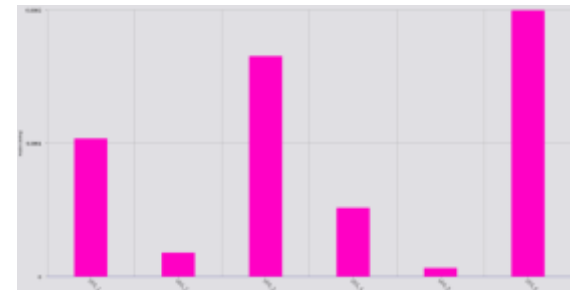
SIRA – a few stakeholders who really care



IWRAP results



	Test case	Unit
Powered Grounding	9.762	Years between incidents
Drifting Grounding	10.02	Years between incidents
Total Groundings	4.944	Years between incidents
Overtaking	47.44	Years between incidents
HeadOn	1,840	Years between incidents
Crossing	398.4	Years between incidents
Merging	1,346	Years between incidents
Bend	55.73	Years between incidents
Area	---	Years between incidents
Total Collisions	23.35	Years between incidents



	Crude oil tanker	Oil products tanker	Chemical tanker
Crude oil tanker	0.000734729	0.000959205	4.825e-05
Oil products tanker	0.00122785	0.00199145	0.0001174
Chemical tanker	9.63805e-05	0.000208193	1.048e-05
Gas tanker	5.82116e-05	0.000112985	6.659e-06
Container ship	0.00031174	0.000591701	3.369e-05
General cargo ship	0.00128443	0.00265554	0.0001174



Risk Value Matrix (SIRA)

		PROBABILITY OR LIKELIHOOD				
		Very Rare (1)	Rare (2)	Occasional (3)	Frequent (4)	Very frequent (5)
CONSEQUENCE OR IMPACT	Catastrophic (5)	5	10	15	20	25
	Major (4)	4	8	12	16	20
	Severe (3)	3	6	9	12	15
	Minor (2)	2	4	6	8	10
	Insignificant (1)	1	2	3	4	5

ALARP (As Low As Reasonably Practicable) is indicated by a green arrow pointing from the top-left (Catastrophic/Very Rare) towards the bottom-right (Insignificant/Rare).

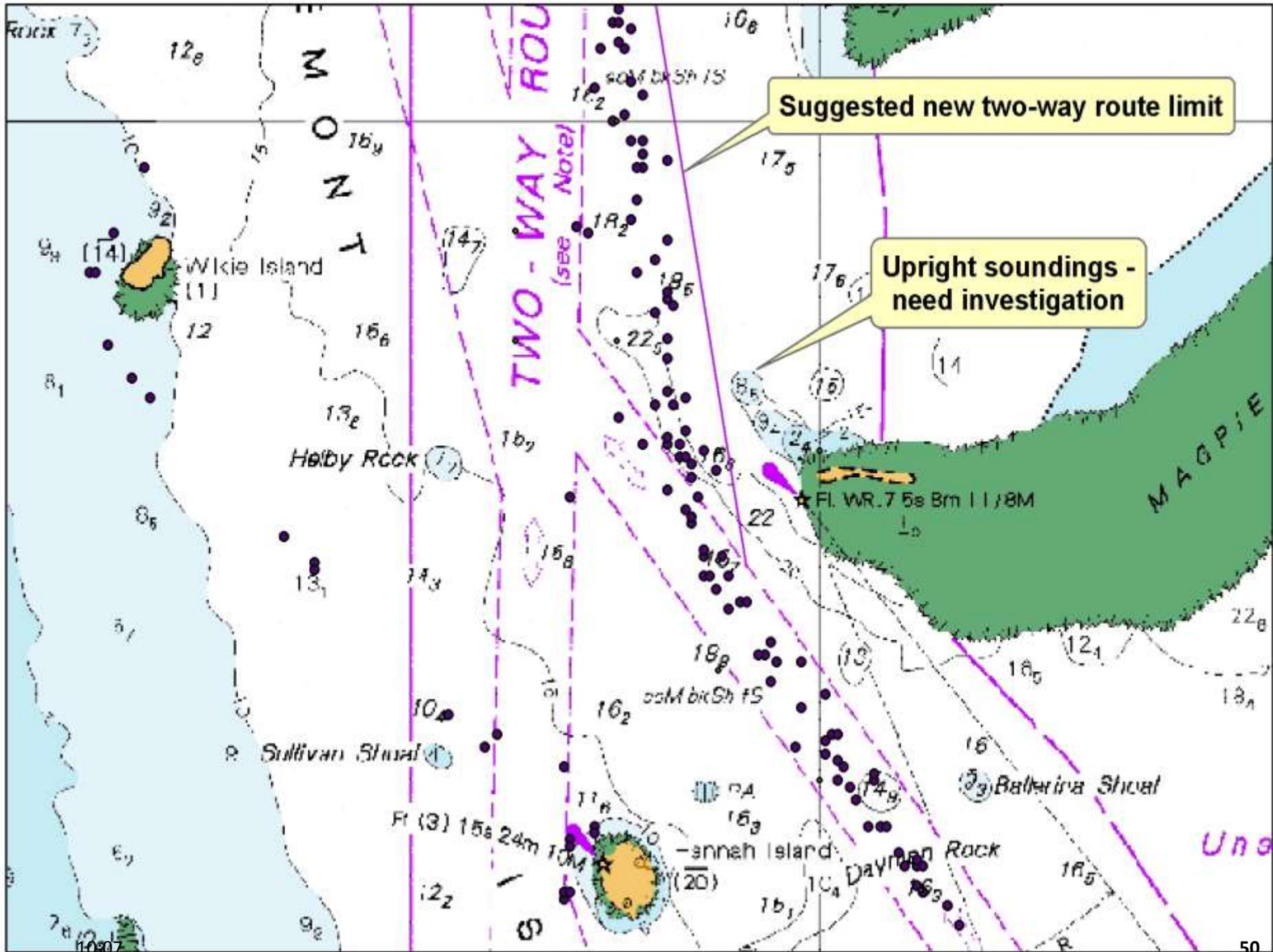


Risk Control Options (RCO)

RCO for each undesirable incident reduce the risk to a level (**As Low As Reasonably Practicable - ALARP**) which is acceptable to stakeholders

The Risk Value will determine what action is required

Risk Value	Risk Category	Action Required
1 - 4	Green	Low risk. No RCOs unless implemented at low cost
5 - 8	Yellow	Moderate risk. Reduce to ALARP level through RCOs
9 - 12	Amber	High risk requiring RCO and significant funding
15 - 25	Red	Very high and unacceptable risk – immediate action required with major funding. Ports/waterways may need to close until risks are at ALARP level





Nautical publications and MSI



SOLAS Chapter V - Introduction

SOLAS Chapter V “refers to the safety of navigation for **all vessels at sea**”

COLREGs defines a “vessel” as any craft that can be used for transportation at sea from the very small (rowing boat) to the very large (VLCC)

SOLAS V Regulation 1 states that “unless expressly provided otherwise” it shall apply to **all ships on all voyages** except warships and ships navigating only in the Great Lakes of North America.



Maritime Safety Information

SOLAS V-4: *“Each Contracting Government shall take **all steps necessary** to ensure that, when intelligence of any danger is received from whatever reliable source, it shall be promptly brought to the knowledge of those concerned and communicated to other interested Governments”*

SOLAS V 13.3: *“Contracting Governments undertake to arrange for information relating to **aids to navigation** to be made available to all concerned. Changes in the transmissions of position-fixing systems which could adversely affect the performance of receivers fitted in ships shall be avoided as far as possible and only be effected after timely and adequate notice has been promulgated.”*

MSI means navigational and meteorological warnings, met forecasts and other urgent safety-related messages for ships



SOLAS Ch V 13.2 and AtoN Data

Competent Authorities must maintain a database of all AtoN in their waters, whether operated by them or not

Minimum information required:

- Name
- Geographic coordinates in standard format
- Characteristics of the AtoN
- Operating schedule

Close liaison and exchange of information with National Hydrographic Office required



Competent Authority and MSI

The Competent Authority must:

Designate the National Co-ordinator in charge of MSI

Set up an organisation capable of issuing navigational warnings 24 hours a day; 365/6 days a year

Such an organisation must conform to the World Wide Navigational Warning Service (WWNWS)

Establish a NAVTEX station if no such station exists in a neighbouring country (unless impracticable – then use SafetyNET)

Maintain up to date NPs covering their waters

Useful UKHO References

- NP283 – MSI
- NP 285 – Global Maritime Distress and Safety System (GMDSS)



Competent Authority Responsibility

Despite adequate precautions, any aid to navigation can fail

If a marine accident occurs which is partly a result of such a failure, the **only way** for a Government to be relieved of its responsibility **is to prove that it had informed mariners of the failure as soon as it had known about it, by all official means:**

NAVTEX VHF (GMDSS area 1)

MF-NAVTEX (GMDSS area 2)

HF and INMARSAT- SafetyNet (GMDSS area 3).



Navigation Warnings for AtoN

AtoN NAVWARNS fall into 3 categories:

Planned changes – To existing AtoN or establishment of new AtoN (normally vital and important AtoN only)

Unplanned changes – failures of Visual, Fog and Radio AtoN (normally those affecting main shipping lanes)

New information from hydrographic surveys or new hazards (e.g. those marked by Emergency Wreck marking Buoys)

Minimum information required is.....

HAZARD and **POSITION**

Use standard descriptions (IMO MSC.1/Circ.1310 and IHO publication S.53 – **NAVGUIDE 6.6.4 Table 22**)



Example Standard Terms

DESCRIPTORS	REMARKS
UNLIT	Incorrect: OUT; EXINGUISHED
LIGHT UNRELIABLE	Incorrect: WEAK; DIM; FLASHING INCORRECTLY
DAMAGED	Loss of significant functionality
DESTROYED	Incorrect: TEMPORARILY
ESTABLISHED (+ LOCATION)	New major AtoN
OFF STATION	Buoy or major floating aid not in charted position
MISSING	Buoy or major floating aid completely absent
RE-ESTABLISHED	Only for AtoN previously reported DESTROYED



Nautical Publications - NPs

Defined by the IMO as:

Special purpose maps [charts] or books

Or a specially compiled database from which these are derived

Issued **officially** by or on behalf of a Government

Normally by an authorised Hydrographic Office

Designed to meet the requirements of marine navigation

All NPs (paper and electronic) must be kept corrected

By hand using weekly corrections – who is responsible?

Electronically for ENCs



NPs to be held by AtoN Authority

Title	Use by AtoN authority
Sailing Directions	Major routes; meteorological data
Tidal publications	Range of tide for moorings; MHW for heights
Lists of Lists of Radio Signals	VHF/Racon prediction; DGPS
Lists of Lights	Details based on your data; range diagrams
Distance tables	AtoN maintenance planning
Chart catalogues	Which charts you should hold
Chart Symbols (INT 1)	Understanding charts; seabed types for sinkers
Mariners Handbook	Ocean routes and climatic information
Paper and/or electronic charts	Essential planning documents



AtoN Provision



SOLAS V Regulation 13

Chapter V Regulation 13.1 requires a Contracting Government to provide “as it deems practical and necessary” by itself or with other Governments “such AtoN as the **volume of traffic justifies** and the **degree of risk requires**”

Ch V Reg 13.2: AtoN should conform to international standards (**IALA recommendations and guidelines**)

Ch V Reg 13.3 **information** about AtoN must be **given to all concerned** (mariners; stakeholders etc.)

Reference: NAVGUIDE Chapter 8 page 179



Obligations of the Competent Authority of a Contracting Government to SOLAS

Provide as many AtoN are required based on a **risk assessment**

Guarantee the reliability of each AtoN

Update the AtoN service as maritime traffic, environmental patterns, technology and resources change

Set up a formal method of informing all concerned including mariners about existing AtoN, new AtoN, and AtoN failures (charts; nautical publications; NAVTEX etc.)

Decide who will provide the AtoN service



Responsibility for AtoN

The Competent Authority (CA) provides or formally delegates the provision of its AtoN service to States; Territories; local government; ports, harbours and waterways; military organisations or private groups

The geographical area of each must be defined

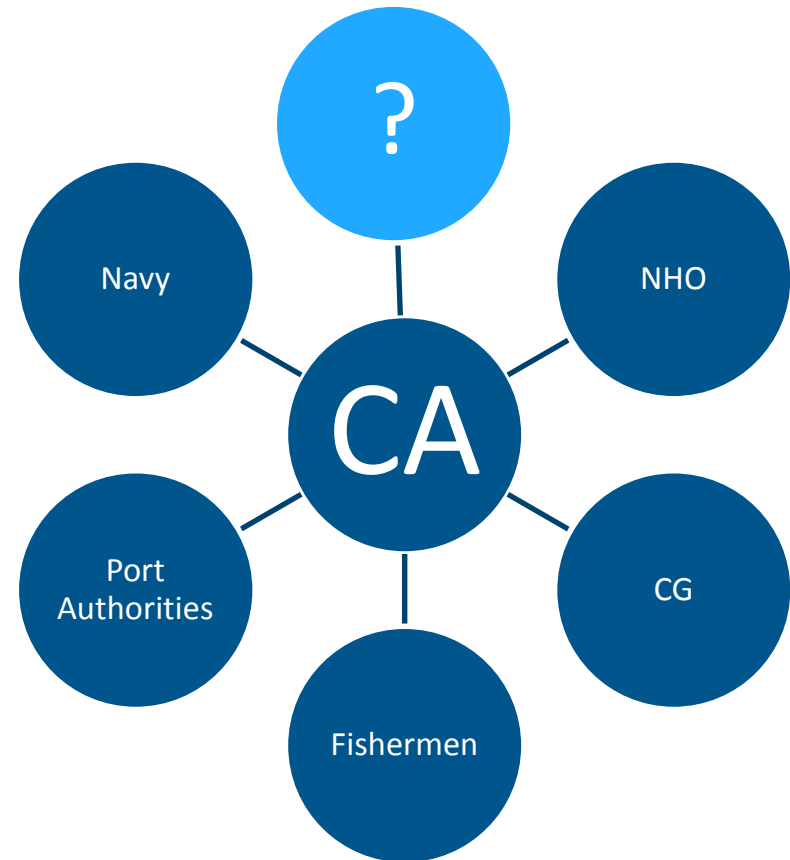
Responsibility for the AtoN service **remains** with the Government **not** with the service provider

Ensure that **national maritime law** specifies which Ministry is the CA and that the CA has the right to audit all AtoN service providers



Stakeholders

“individuals, groups or organisations able to affect or be affected by a decision or activity related to AtoN service provision”



Reference IALA GL 1079 on User Consultation



Funding of AtoN Services

State Pays – Ship owners get a “free” AtoN service .. but the service is funded from taxes or Ministerial budgets

User Pays – Commercial shipping companies and/or fishing and recreational vessels pay a contribution to the cost of an AtoN service. **Note:** make sure that funds collected are “ring-fenced” for the AtoN service

In some countries, a combination of the two is used

References: IALA Recommendation V-102 and on the application of the User Pays principle to VTS



Delivering as One

IMO, IHO, IALA



DELIVERING AS ONE



For consistent implementation and strengthening of international standards, capacity building actions are essential



Nouakchott, September 2013





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.

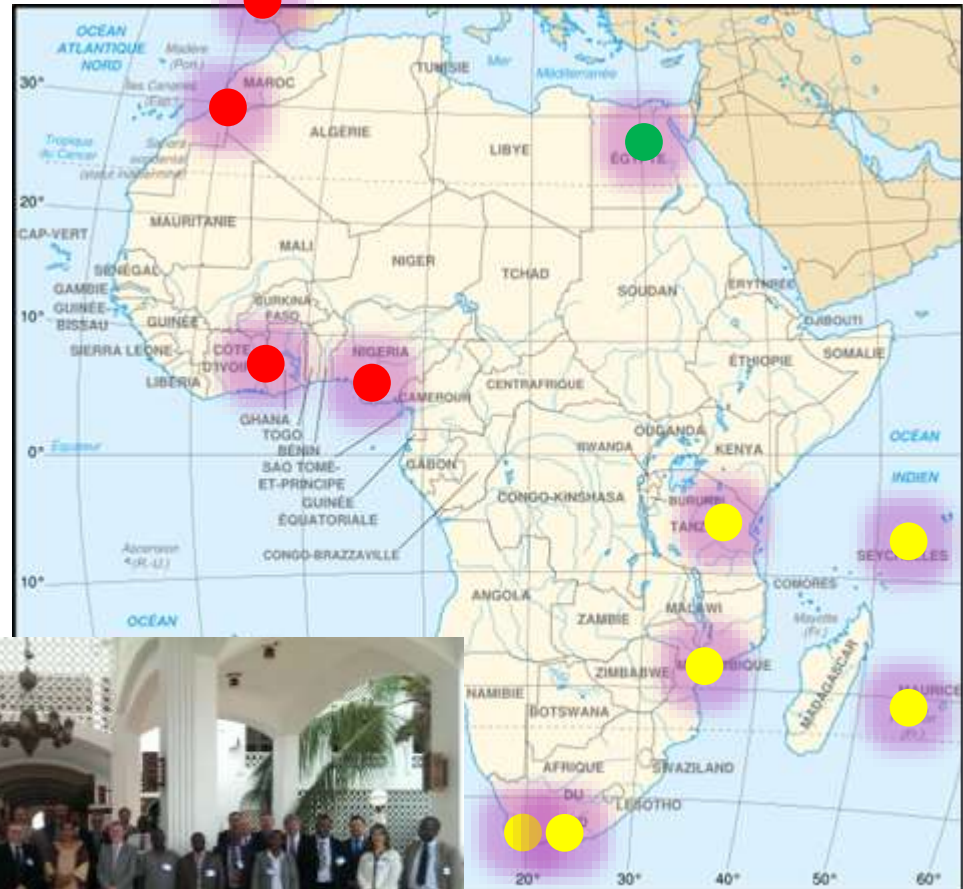
The provision of both VTS and AtoN services should be based on a formal analysis of maritime traffic patterns and risk. The same applies to the provision of hydrographic services.

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Regional hydrographic Conferences

- EAtHC - CHAtO
 - Lisbon, Portugal, 2012
 - Casablanca, Morocco, 2014
 - Cadiz, Spain, 2016
 - Lagos, Nigeria, 2018
- SAIHC - CHAIA
 - Maputo, Mozambique, 2014
 - Dar-Es-Salaam, Tanzania, 2015
 - Cape Town, South Africa, 2016
 - St Gilles, La Réunion, 2017
 - Seychelles, 2018
 - Cape Town, 2019
- NIOHC
 - Cairo, Egypt, 2017





IMO Audit

October 2005: IMO introduced a Voluntary Audit Scheme for IMO Member States (VIMSAS).

States could ask IMO to check their compliance with IMO Statutory Instruments including SOLAS V Regulation 13.

References: IALA Guidelines No. 1054; 1115 on preparing for an audit on AtoN Service/VTS delivery.

The Audit Scheme is **mandatory** (legally enforceable) from 1st January 2016 onwards (26th Assembly Resolution A.1018(26) Nov 2009).

National Authorities **will be** audited at some time after 2016.



IMO Audit



2016	1	Guinea-Bissau	2018	51	Djibouti
	2	Guinea		67	Kenya
	3	Côte d'Ivoire		68	Sudan
	5	Togo		70	Sao Tome and Principe
	6	Mauritania		71	Equatorial Guinea
	13	Angola		73	Sierra Leone
2017	14	Seychelles	2019	75	Congo
	15	Nigeria		76	Eritrea
	16	Senegal		79	Algeria
	21	Somalia		80	United Republic of Tanzania
	22	Egypt		82	Comoros
	26	Ghana		83	Uganda
	29	Gambia		85	Zimbabwe
	33	Gabon		90	Libya
	35	Democratic Republic of the Congo		93	Mozambique
	37	Cape Verde			
	48	Madagascar			

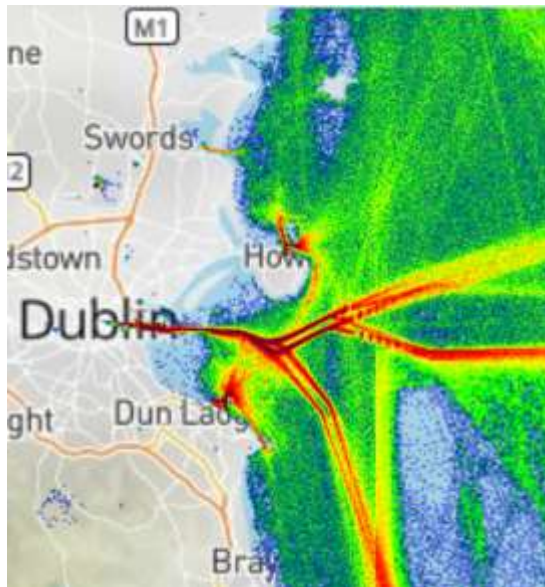


Coastal States in need

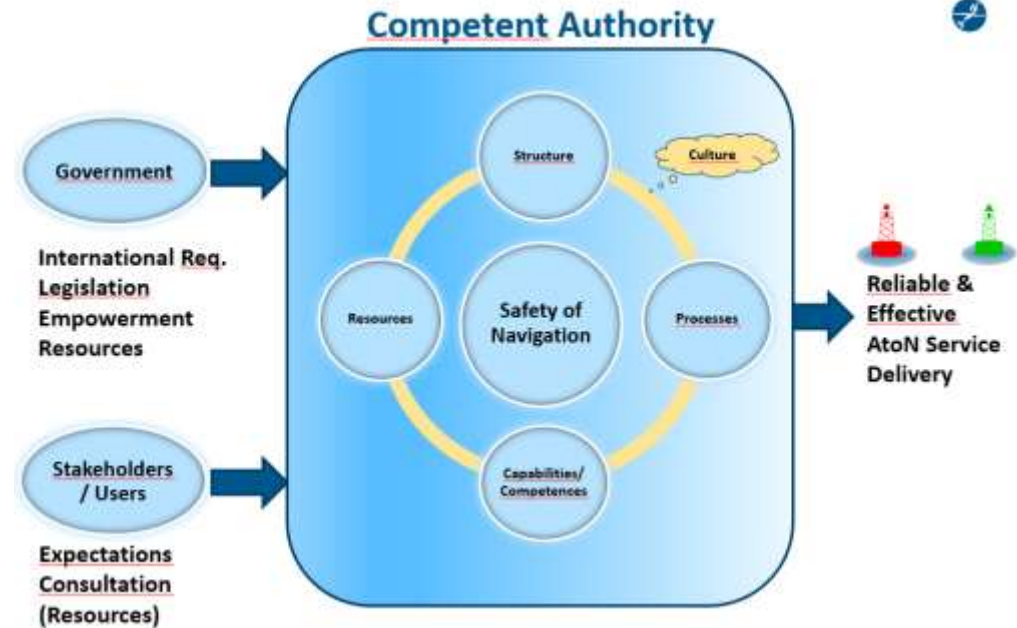
IALA WWA analysis



Volume of Traffic and Degree of Risk (from SOLAS)

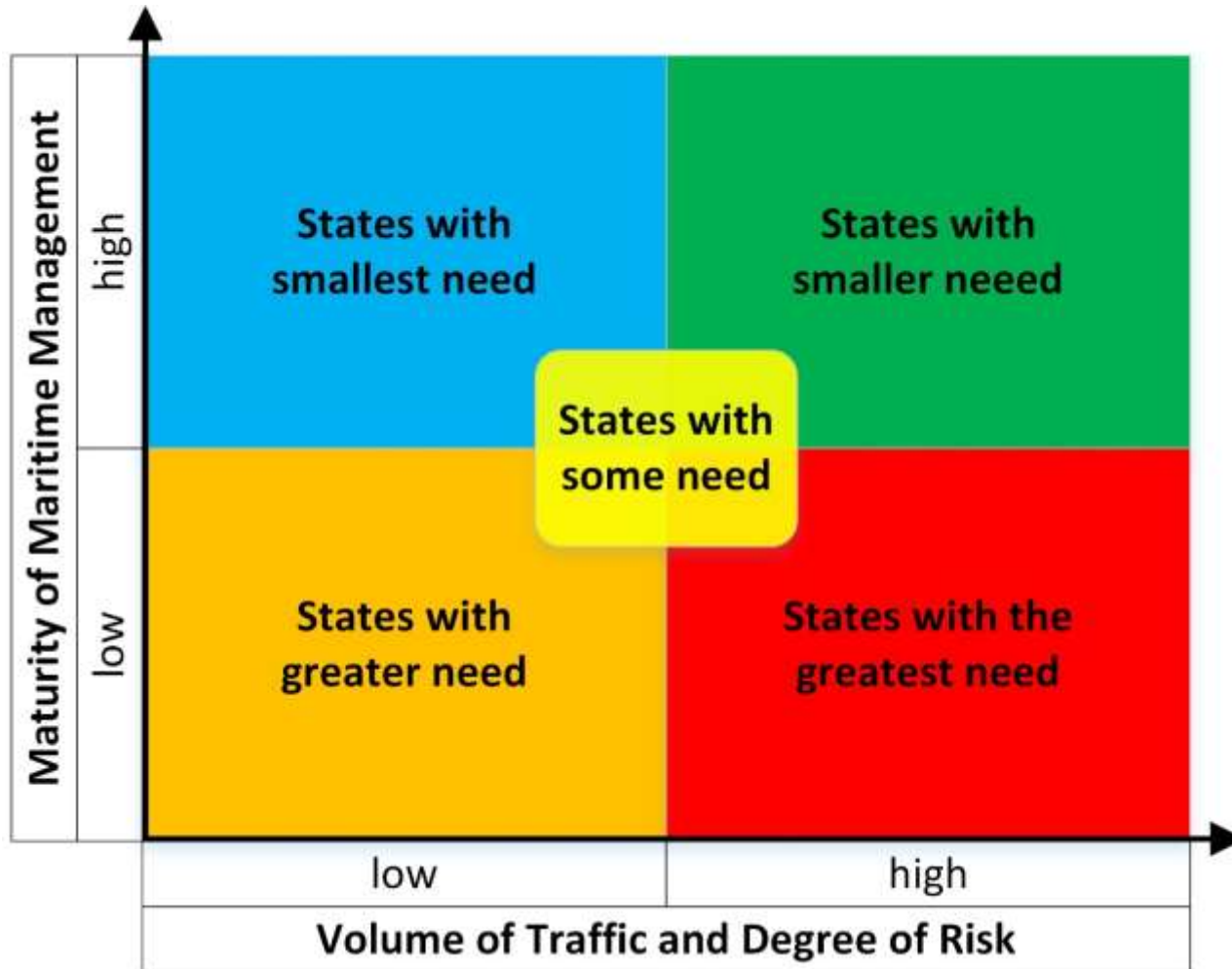


Maritime Management Quality



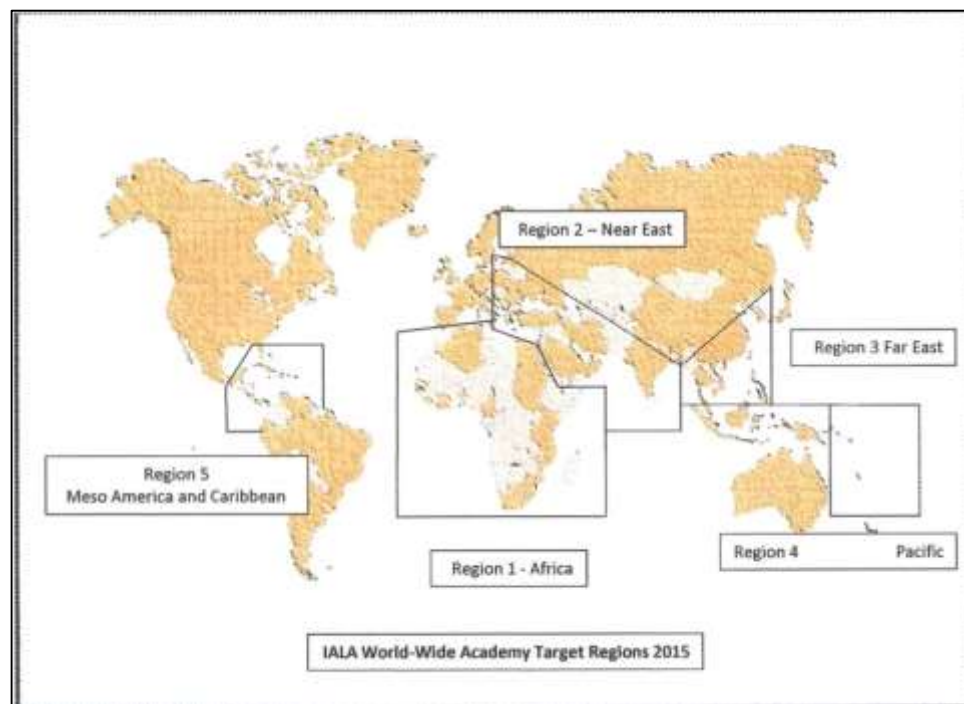


154 Coastal States Needs Evaluation



States in Need 2015

Regions		2015
Africa Anglophone	1	12
Africa Francophone		8
Africa Lusophone		-
Near East	2	13
Far East	3	5
Pacific	4	12
Meso America and Caribbean	5	19
Total States		69





States in Need 2018

	Continental Regions					
Degree of Need	Africa	Europe	Asia	Pacific	Americas	Total
Some need (priority 3)	6	1	3	1	4	15
Greater need (priority 2)	7	1	3	2	7	20
Greatest Need (priority 1)	15	2	7	0	3	27

If a State is on the list, it has yet to demonstrate its capability in terms of the **quality of maritime management** to meet its obligations under SOLAS Chapter V so that Maritime Safety Information and AtoN services are delivered to full international standards.





Capacity Building

Within Africa



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, Ivory Coast, Morocco, Portugal, Senegal, South Africa, ...).



CB Awareness Seminars

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.

A seminar on Safety of navigation in Africa was organised, with IMO and IHO in Marrakesh, Morocco (6 February 2018)

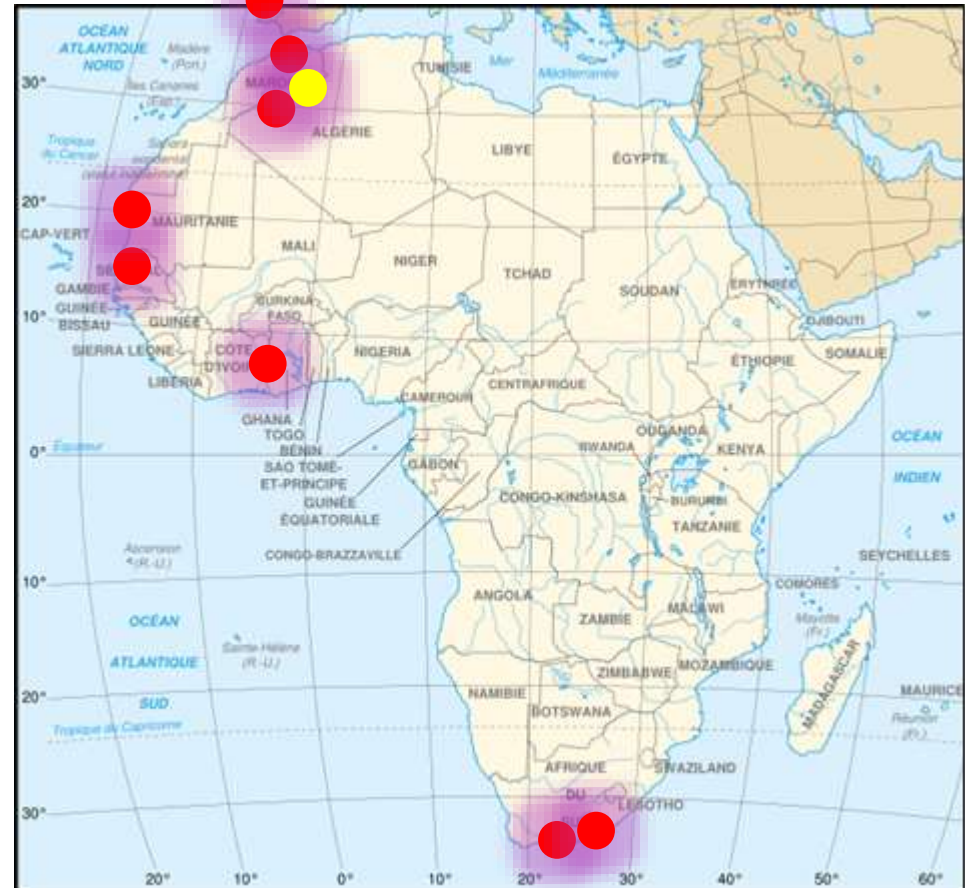


Awareness seminars

- Cape Town, South Africa, 2012
- Nouakchott, Mauritania, 2013
- Accra, Ghana, 2014
- Dakar, Senegal, 2015
- Lisbon, Portugal, 2016
- Tanger, Morocco, 2016
- Marrakesh, Morocco, 2018
- Cape Town, South Africa, 2019

Awareness workshop

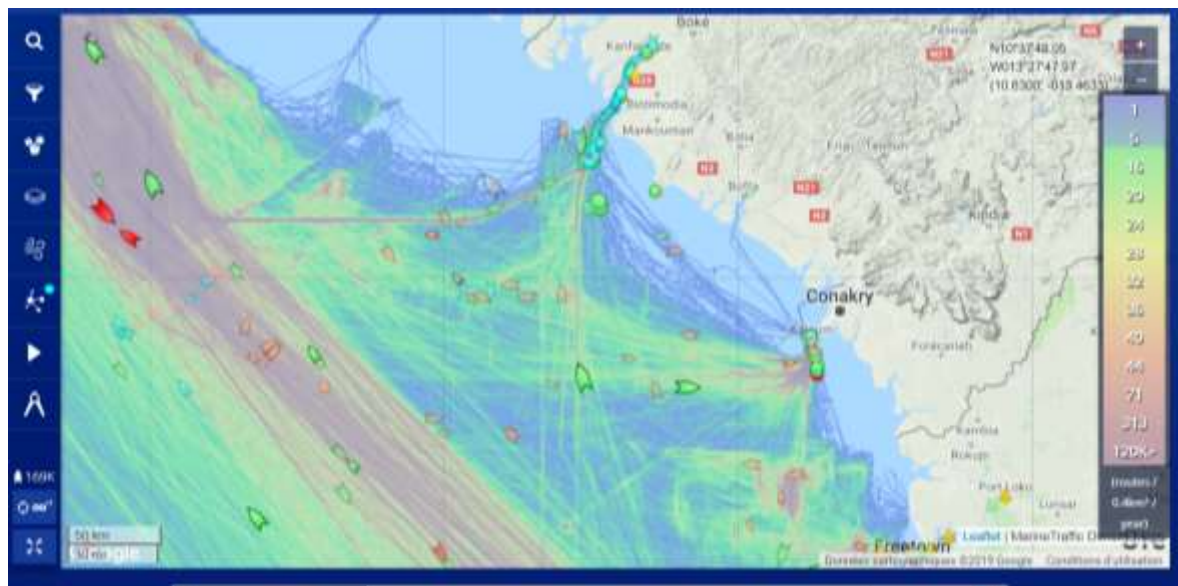
- Rabat, Morocco, October 2019



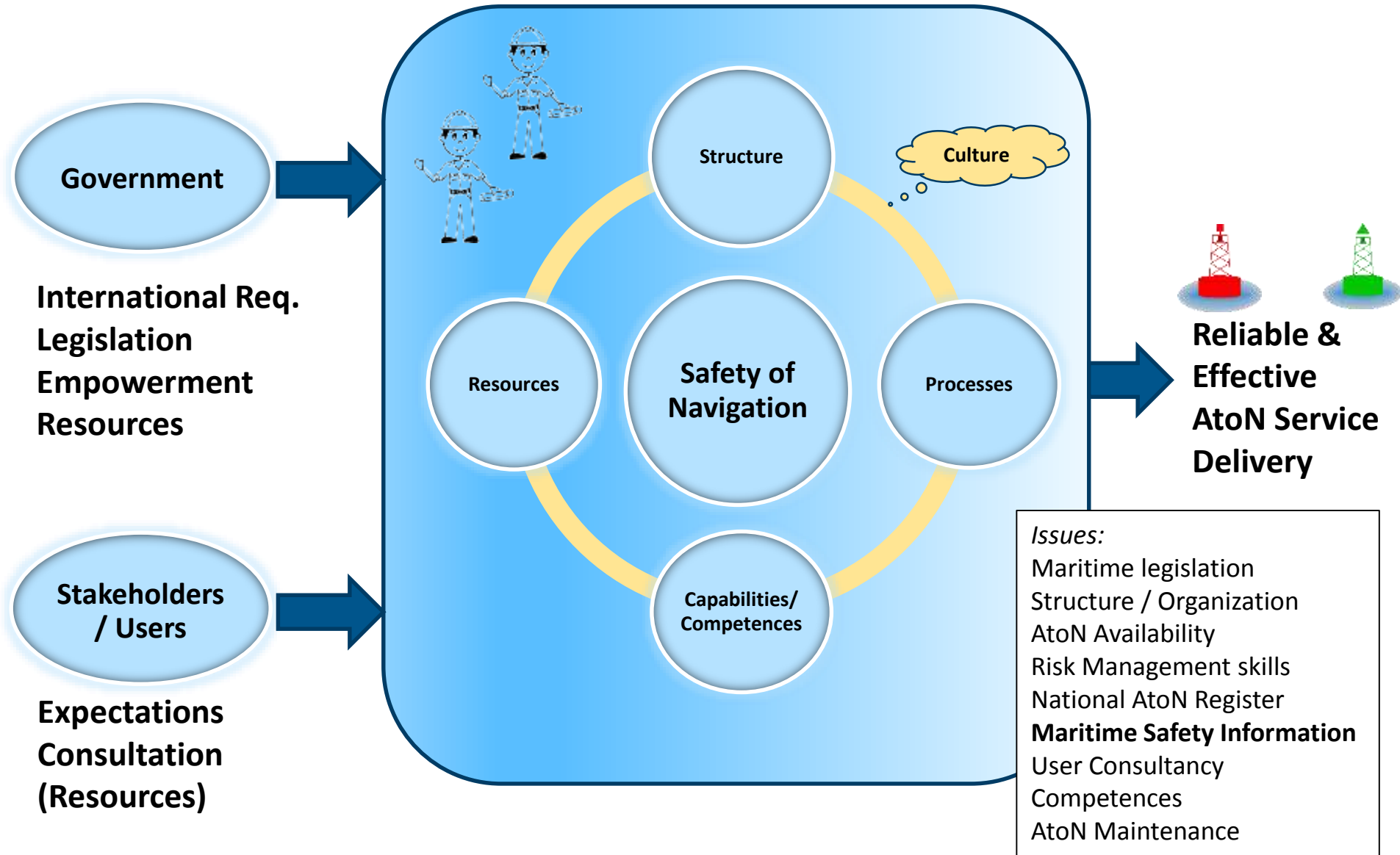


Organisation of a Needs Assessment Mission

- The request (letter, email) should be sent by the National Competent Authority to the IALA WWA; Terms of reference are validated; dates chosen; and experts selected.
- The only costs to be supported by the coastal State are those for the experts transportation within the country



Competent Authority





Needs Assessment missions within Africa

★ Held

Benin, Cameroon, Cape Verde, Comoros, Côte d'Ivoire, Liberia, Mauritius, Namibia, Sudan, Togo, Mozambique, Angola, Madagascar, Guinea

○ Requested

Tunisia, Somalia, Djibouti



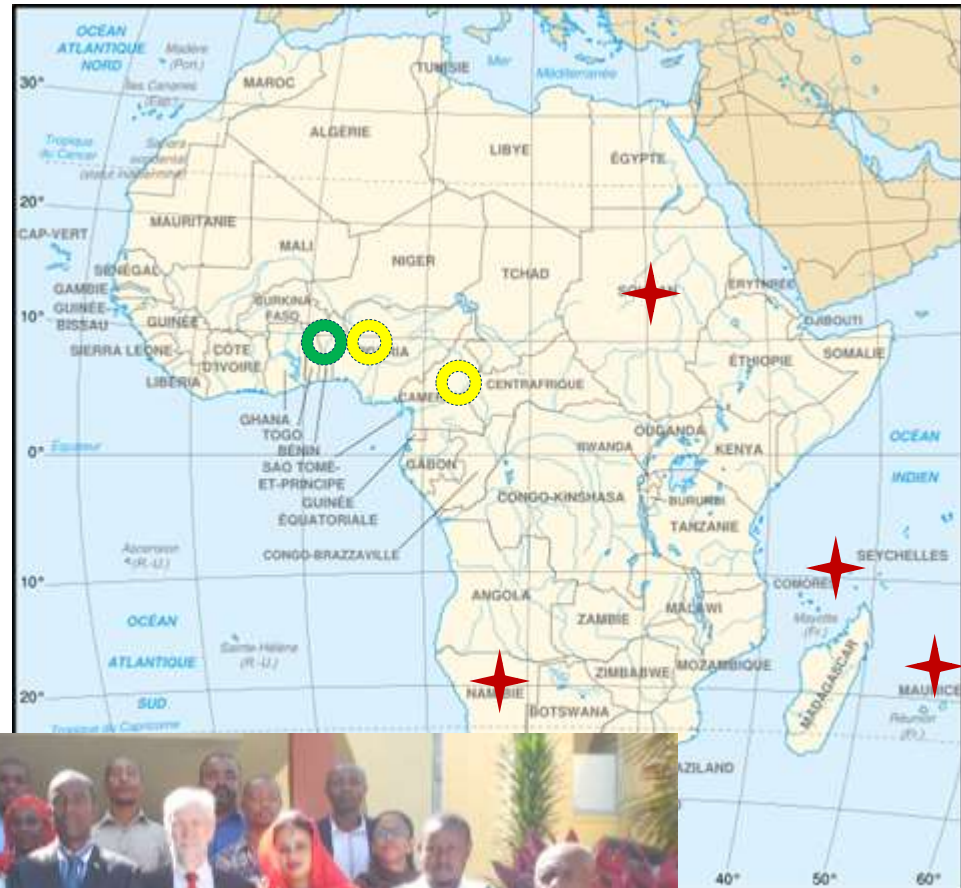


Review missions within Africa

★ Held
Comoros
Mauritius
Sudan
Namibia

● Scheduled
Togo

○ Expected
Benin
Cameroon





CB - The Way Forward

This will leave 16 potential 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 SEAIGNEP 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.

Contacts are on-going with the African Union.

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Training

Within Africa



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).



Training

- Necessary, mandatory
- IALA model courses, international standards
- Accreditation
- A few direct actions
- Distance learning





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.

IALA WWA model Courses

Aids to Navigation courses L1 and L2 series:

- L1.1 – Level 1 Marine Aids to Navigation Manager
- L1.2 – Master of Marine Aids to Navigation Management
- L1.3 – Use of the IALA Risk Management Tools
- L1.4 – GNSS and E-Navigation
- L1.5 – Historic Lighthouse Projects
- L2.0 – Level 2 Technicians

VTS courses – V-103 series

- V-103/1 – VTS Operator
- V-103/2 – VTS Supervisor
- V-103/3 – VTS On-the-Job Training
- V-103/4 – VTS On-the-Job Training Instructor
- V-103/5 – Revalidation process for VTS Certification and Qualification





Distance Learning

Since 2016, 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.iala-aism.org



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.



Accredited Training Organisations – Status within Africa

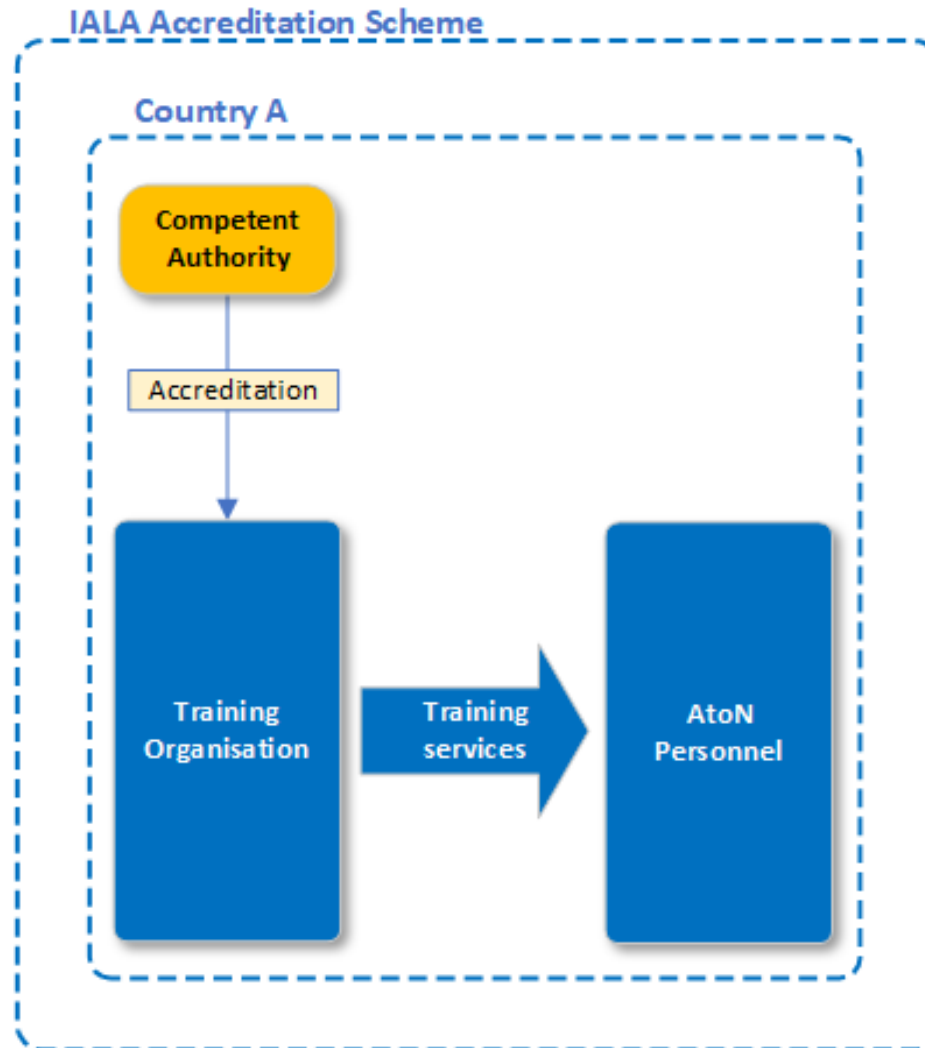
As part of its training Strategy, IALA encourages African States to accredit training organisations to deliver approved training programmes based on IALA model courses.

- There are in France two Accredited Training Organisations (ATOs) delivering VTS courses and one delivering AtoN courses.
- There are in Morocco two Accredited Training Organisations (ATOs) delivering AtoN courses.
- There is in South Africa one Accredited Training Organisations (ATO) delivering VTS courses and AtoN Level 1 course. They should be able to deliver Level 2 AtoN Courses (2020?)
- 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 is considering the possibility to host VTS operator sessions

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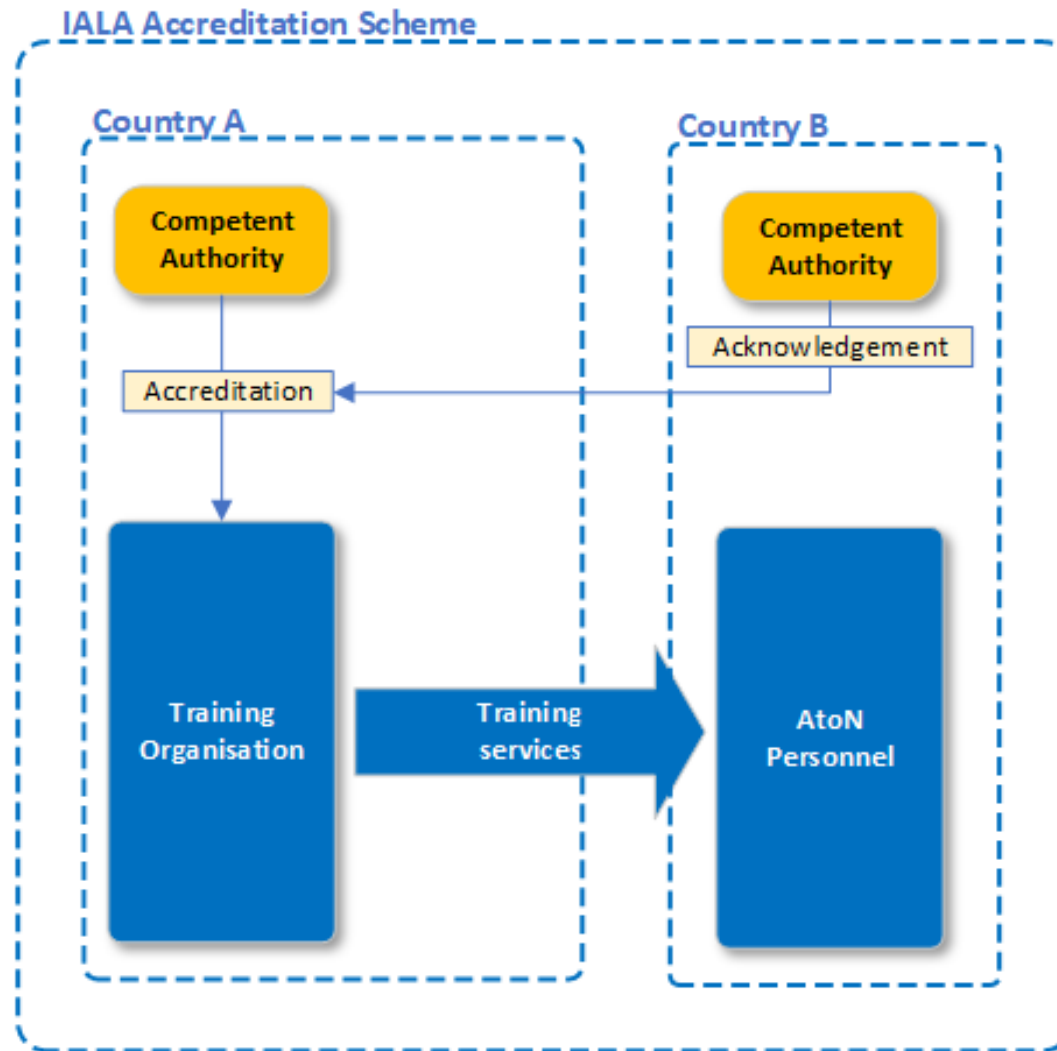


Accreditation process



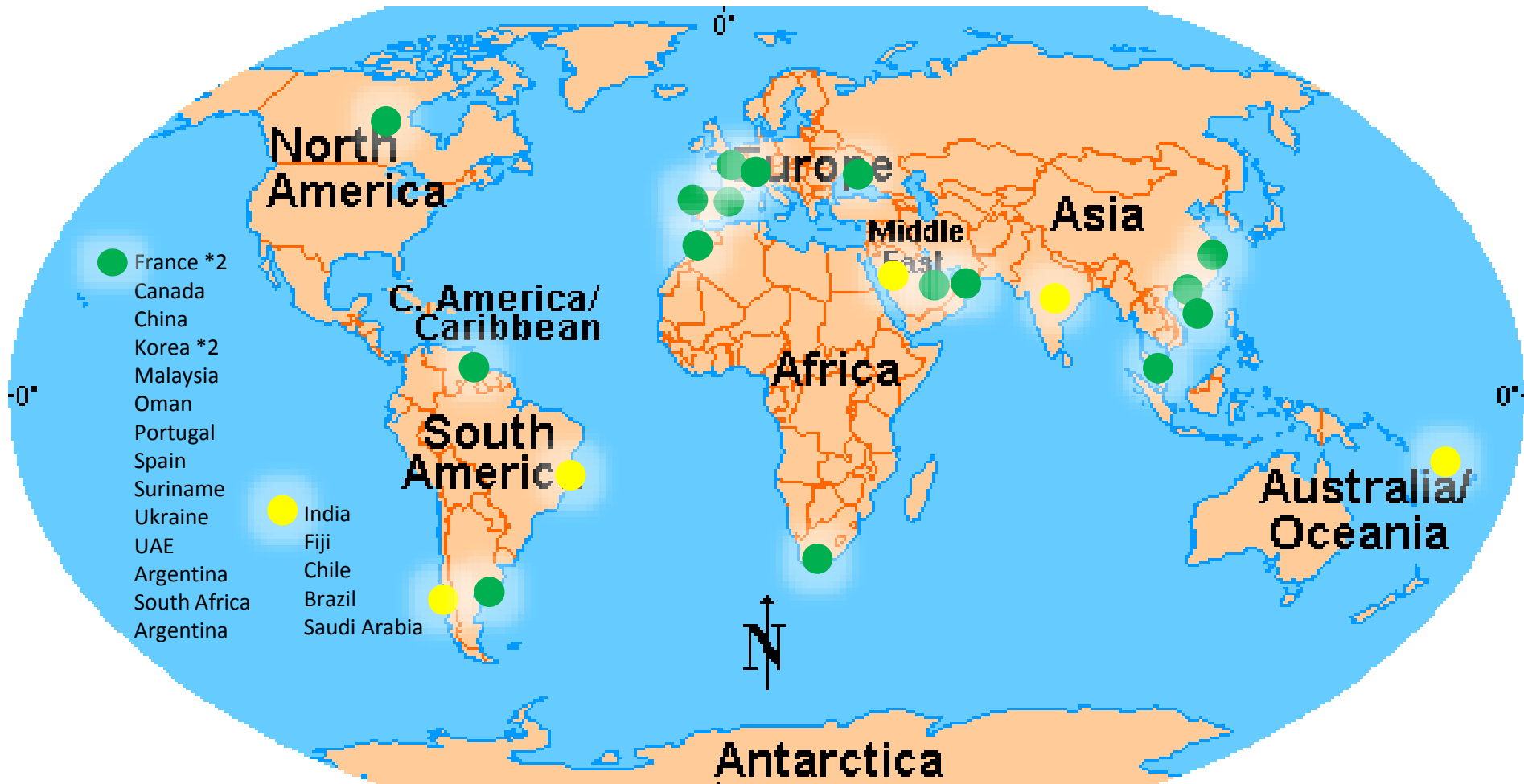


Accreditation process





Accredited Training organisations (29)





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.

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.

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



African AtoN's Certificates

According to the up-dated MOU between IALA and France National Competent Authority (Direction des Affaires Maritimes), “Level 1” AtoN manager courses has been held in France every year since 2014, allowing 3 to 4 participants from African French speaking countries (Djibouti, Gabon, Morocco, Senegal, Togo) to attend each year, with no scholarship fee.

According to a MOU between IALA and Moroccan National Competent Authority (DPDPM), “Level 1” AtoN manager courses has been held in Casablanca in 2018 and 2019, allowing 4 participants from African French speaking countries to attend each course, with no scholarship fee.

Other participants from African countries 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).



Level 1 AtoN Managers owning the international certificate

71 owners within Africa:
Benin (2), Cameroon (2), Comoros (2), Congo (1), Democratic Republic of Congo (2), Djibouti (1), Gabon (2), Ghana (1), Guinea (2), Ivory Coast (4), Kenya (1), Liberia (1), Madagascar (4), Mauritius (1), Morocco (29), Togo (2), Senegal (1), Somalia (1), South Africa (11), Sudan (1)





“Level 1” Management Courses

2017

- China
- Korea
- France
- Morocco
- Suriname
- Distance Learning

2018

- China
- Equador
- France
- Morocco
- Suriname
- Malaysia
- India
- South Africa
- Distance Learning

2019:

- Malaysia
- India,
- Morocco
- France,
- Suriname
- Distance Learning



“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 2020 (Morocco, Ghana, South Africa)

AtoN Technicians

Level 2 training participants



★ 7 managers and technicians:
Djibouti (1), Comoros (3),
Congo (1), Madagascar (1),
Senegal (1)





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)		South Africa Ghana
Africa (F)	Abidjan Casablanca <i>France</i>	Morocco <i>France</i>
Near East	Abu Dhabi	Oman
Far East	Malaysia Singapore Japan	Malaysia China
SW Pacific	Australia	Fiji (SPC)



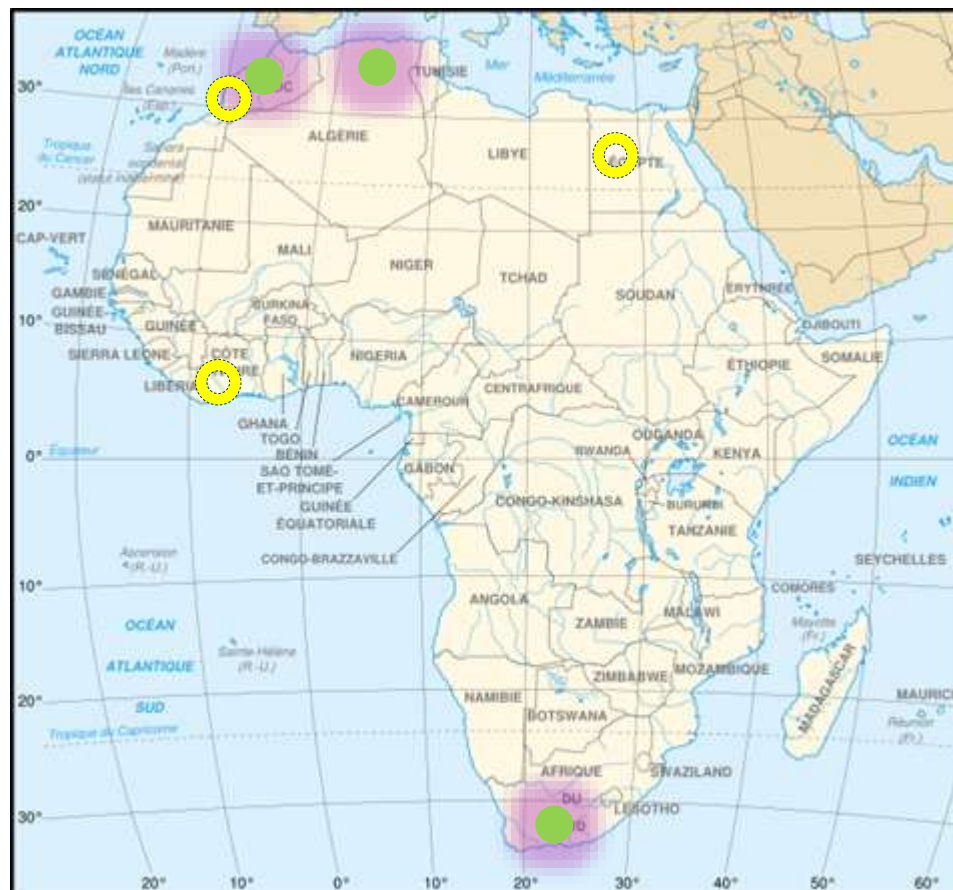
Training organisations within Africa

● Accredited:

- ✓ VTS : Algeria, South Africa
- ✓ AtoN: Morocco, South Africa

○ Possible:

- ✓ VTS : Côte d'Ivoire, Egypt, Morocco
- ✓ AtoN: Egypt





Connecting people





Regional cooperation



Tanger,
March 2016



Dakar,
December 2015



Marrakesh,
February 2018



Conclusions



Information to mariners

AIDS TO NAVIGATION

The aids to navigation on this chart are reported to be unreliable. They may be missing, unlit or out of position.



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 SEAIGNEP members to assist this programme is seen as key to its success.



Recommendations

It is recommended to SAIHC 16 participants:

- **To be compliant with IMO Statutory Instruments**
- **To implement the action plans taking in account IALA WWA mission's report recommendations**
- **To ask IALA for CB and training support,**
- **For example when coastal states are preparing for or have undertaken the IMO audit process to meet items that have been raised within the audit, and also to share best practice**
- **To support IALA change of status**
- **To apply for IALA Membership**
- **To send participants to the IALA Technical Committees, to take benefits of the IALA membership, and increase the safety of navigation in their coastal States' waters**
- **To train AtoN and VTS staff to allow them performing the required tasks**



QUESTIONS?

Contact: jacques.manchard@iala-aism.org