INTERNATIONAL ASSOCIATION OF MARINE AIDS TO NAVIGATION AND LIGHTHOUSE AUTHORITIES

IHO Hydrographic Commission on Antarctica, 28-30 June 2016

Secretary-General Francis ZACHARIAE
Denmark

39,000 km arctic coastline
CONTENTS

• About IALA
• The World-Wide Academy
• Polar activities
• The Future, from NGO to IGO
About IALA

International Association of Marine Aids to Navigation and Lighthouse Authorities
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
The Maritime Buoyage Agreement

IALA A and IALA B

During the IALA conference in November 1980 two navigation marking systems, ie the System A (red colour for the left hand of the ship) and the System B (red colour 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
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)
- 55 Associated Members
- 126 Industrial Members
- 47 Honorary Members
The Committees

The “Power House” of IALA

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

Three Pillars

• Policy and Technical Operations
• Administration and Finance
• The World-Wide Academy
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.
The World-Wide Academy
Training and capacity building
The World-Wide Academy

The vehicle by which IALA delivers training and capacity building

- Started in January 2012
- Independently funded
- Focused on Strategic Goal 2
- Facilitates both AtoN and VTS training
- Develops capacity building in 5 key regions
## Target States 2016 - 2019

<table>
<thead>
<tr>
<th>Region</th>
<th>Target States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa Anglophone</td>
<td>9</td>
</tr>
<tr>
<td>Africa Francophone</td>
<td>7</td>
</tr>
<tr>
<td>Africa Lusophone</td>
<td>4</td>
</tr>
<tr>
<td>Near East</td>
<td>13</td>
</tr>
<tr>
<td>Far East</td>
<td>5</td>
</tr>
<tr>
<td>South West Pacific</td>
<td>12</td>
</tr>
<tr>
<td>Meso America and Caribbean</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total States</strong></td>
<td><strong>69</strong></td>
</tr>
</tbody>
</table>

![Map of Target Regions](image)
Training

Generally delivered by Accredited Training Organizations

• VTS courses – V-103 series
• Aids to Navigation courses E-141 series
• E141/1 – Level 1 AtoN Managers
• E141/2 – Obligations of Senior Management in National Competent Authorities
• IALA WWA.L2.0 – Level 2 Technicians
• Annual Risk Management Seminars (IALA WWA.L1.3)
• Annual GNSS and e-Navigation course (IALA WWA.L1.4)
Capacity Building

In developing countries

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 sometime lack the capacity to do so. The Academy actively facilitates that process through technical missions and training events.
Activities
in the Polar Region
Activity
In the Arctic Region

• 2010 IALA Resolution (AtoN in Arctic Waters)
• Special Group for “arctic Councilors”
  • Looking at hosting an IHO/IALA seminar
• Workshop on providing AtoN services in Polar Regions
  • IALA Guideline No. 1108 on the challenges of providing AtoN Services in Polar regions
• Participation in Arctic Council WG, PAME
• Workshop on the challenges of providing AtoN services in hot climates, September 2016
2010 resolution (IMO MSC 87/INF.15)

The Arctic IALA Members should:

• initiate the establishment of a common Arctic ship reporting and data sharing system;
• develop a common approach to marine traffic awareness and monitoring;
• move towards a single, harmonized system of marine aids to navigation; and
• anticipate and mitigate risk to maritime traffic and the marine environment.
IALA should support the members in relation to:

- enhancing marine traffic awareness and providing a forum for those establishing ship reporting and data sharing systems;
- the marking of polar routes and development of virtual aids to navigation;
- the application of risk management methodology; and
- the importance of improving hydrographic service in the region.
IALA-IHO Seminar on Arctic Navigation
IALA HQ summer 2017

- To raise awareness of needs of maritime safety in the Arctic
- To agree on desirable coordinated action
- To decide on follow up action
IALA-Net

Based on input from National Members

IALA-NET is a near real time maritime data exchange service, provided through the Internet. It has AIS data storage and statistics capability.
It is a worldwide service available only to national competent authorities who provide maritime data from their area of responsibility in exchange for data from other participants.
The service is intended to assist participating authorities in fulfilling their duties in relation to maritime safety, security, protection of the marine environment, and the efficiency of navigation. Participation in IALA-NET is free of charge.
Risk to Navigation

- How to measure traffic volume?
- How to quantify risks?
Recommendations and Guidelines
e-Navigation

- Virtual AtoN
- IALA work on e-Navigation
Welcome to ArcticWeb

An effort from Danish Maritime Authority to improve maritime safety in the Arctic region. ArcticWeb serves as a single access point to safety related information, provides streamlined reporting and allows for voluntary coordinated voyage through sharing of positions and planned routes. Ships in the area and their organizations may request access via the button below.
Your Ship - ORASILA
AIS Information
- MMSI: 200430000
- Callsign: CYDK2
- Country: Denmark
- Destination: KYSTFJØRDT
- Nav status: Under way using engine
- ETA: 2013-08-28T23:00:35

Reporting
- Ship Information: OK
- Schedule: OK
- Active Route: ACTIVE
- Greengas Report: OK

Additional Information
- Historical Track: AVAILABLE
- Nearest Ships: AVAILABLE
- 3-6-9 hour distance circle: AVAILABLE
- METOC: AVAILABLE

Search Ships

Selected Ship - INTERLINK EQUITY

Legends
The future
From a Non-Governmental Organization to an Intergovernmental Organization
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)
• 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
QUESTIONS?