



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







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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
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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.

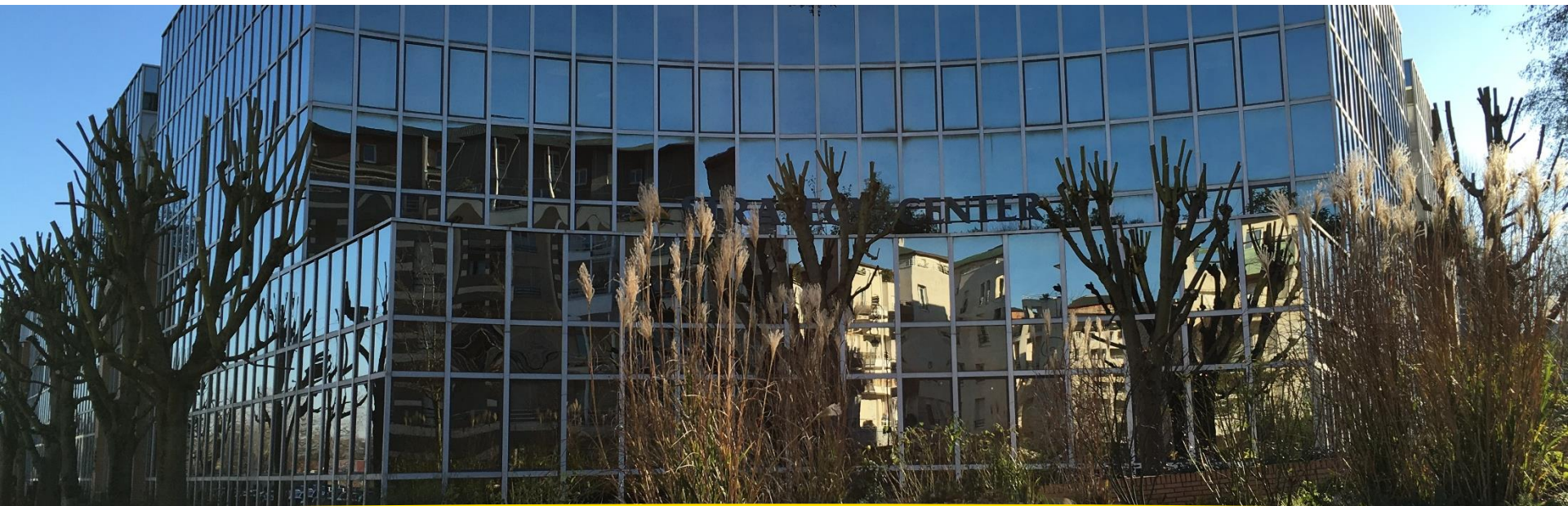




Headquarters

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
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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.
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The World-Wide Academy

Training and capacity building



The World-Wide Academy

The vehicle by which IALA delivers training and capacity building

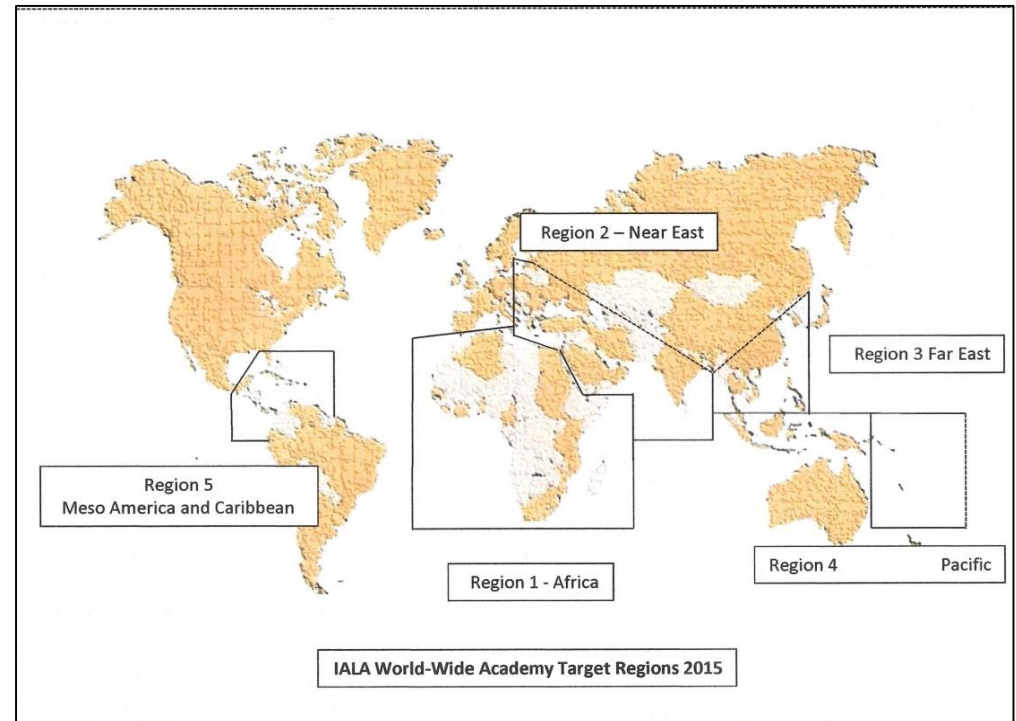
- Started in January 2012
- Independently funded
- Focused on Strategic Goal 2
- Facilitates both AtoN and VTS training
- Develops capacity building in 5 key regions





Target States 2016 - 2019

Region	Target States
Africa Anglophone	9
Africa Francophone	7
Africa Lusophone	4
Near East	13
Far East	5
South West Pacific	12
Meso America and Caribbean	19
Total States	69





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)
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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 a 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
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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.
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2010 resolution (IMO MSC 87/INF.15)

IALA should support the members in relation to:

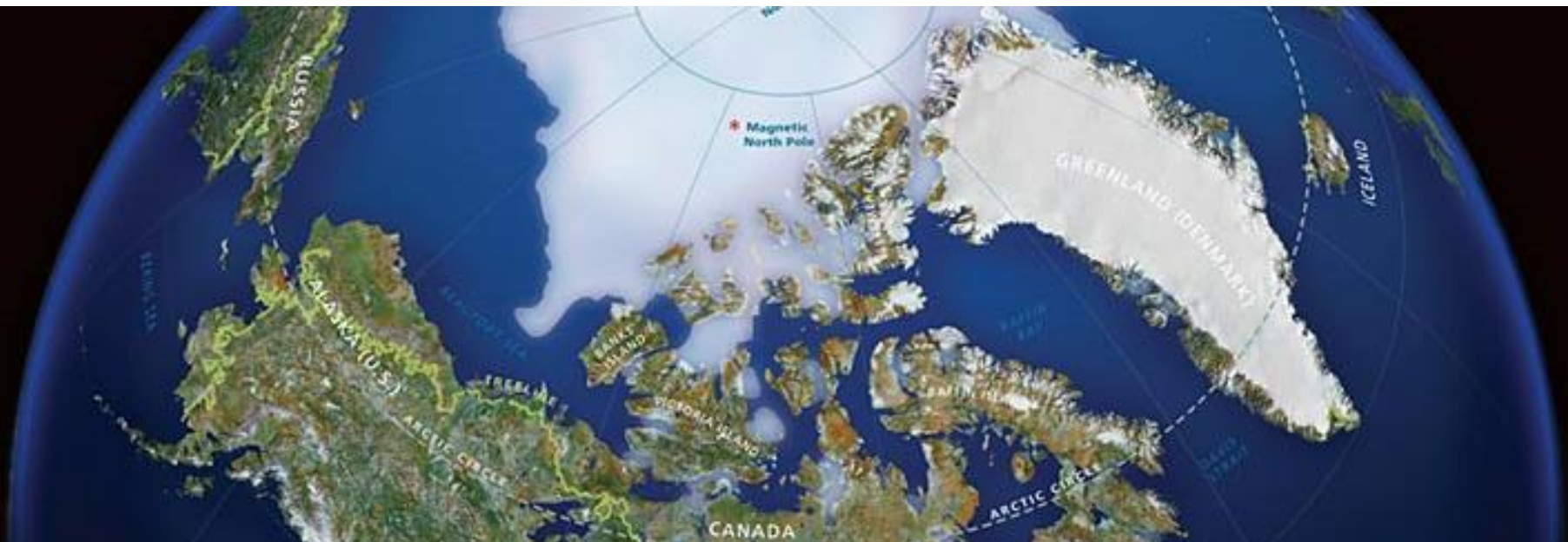
- enhancing marine traffic awareness and providing a forum for those establishing ship reporting and data sharing systems;
 - the marking of polar routes and development of virtual aids to navigation;
 - the application of risk management methodology; and
 - the importance of improving hydrographic service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





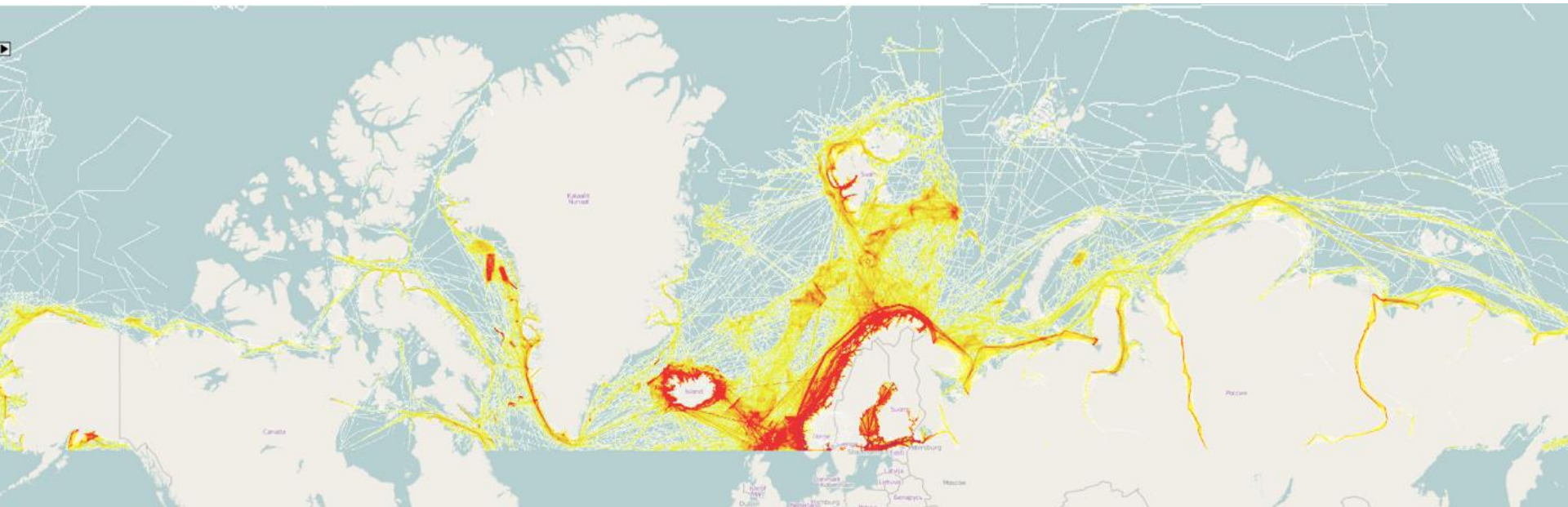
IALA-Net

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.

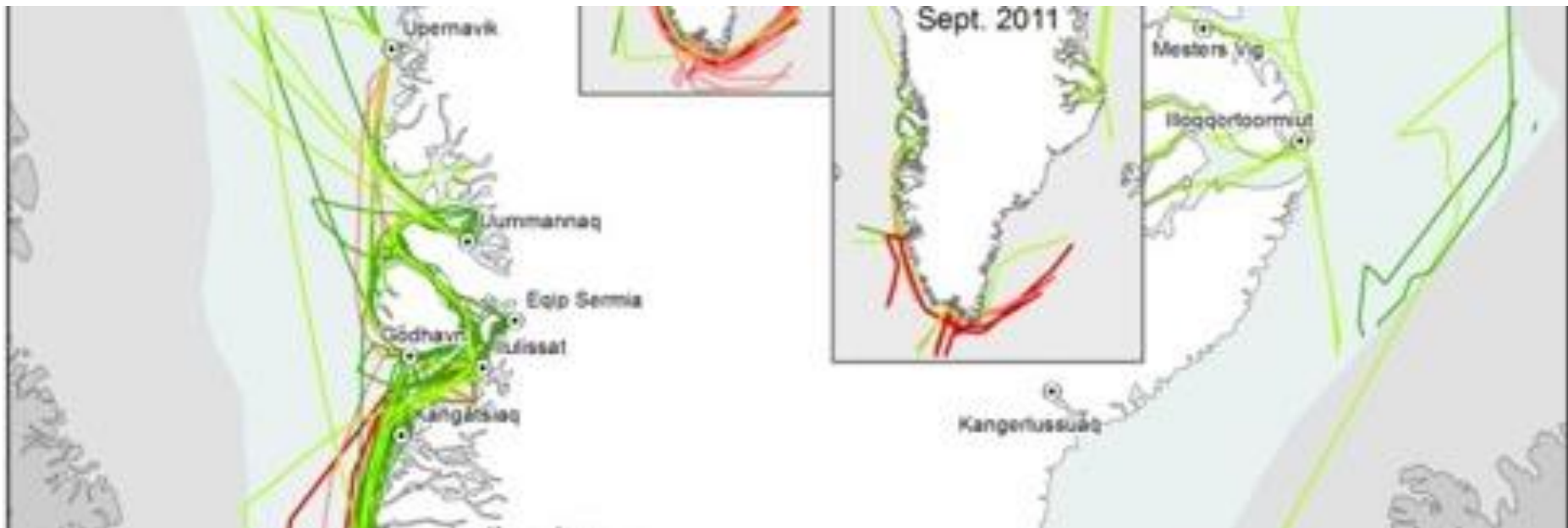
The service is intended to assist participating authorities in fulfilling their duties in relation to maritime safety, security, protection of the marine environment, and the efficiency of navigation. Participation in IALA-NET is free of charge.





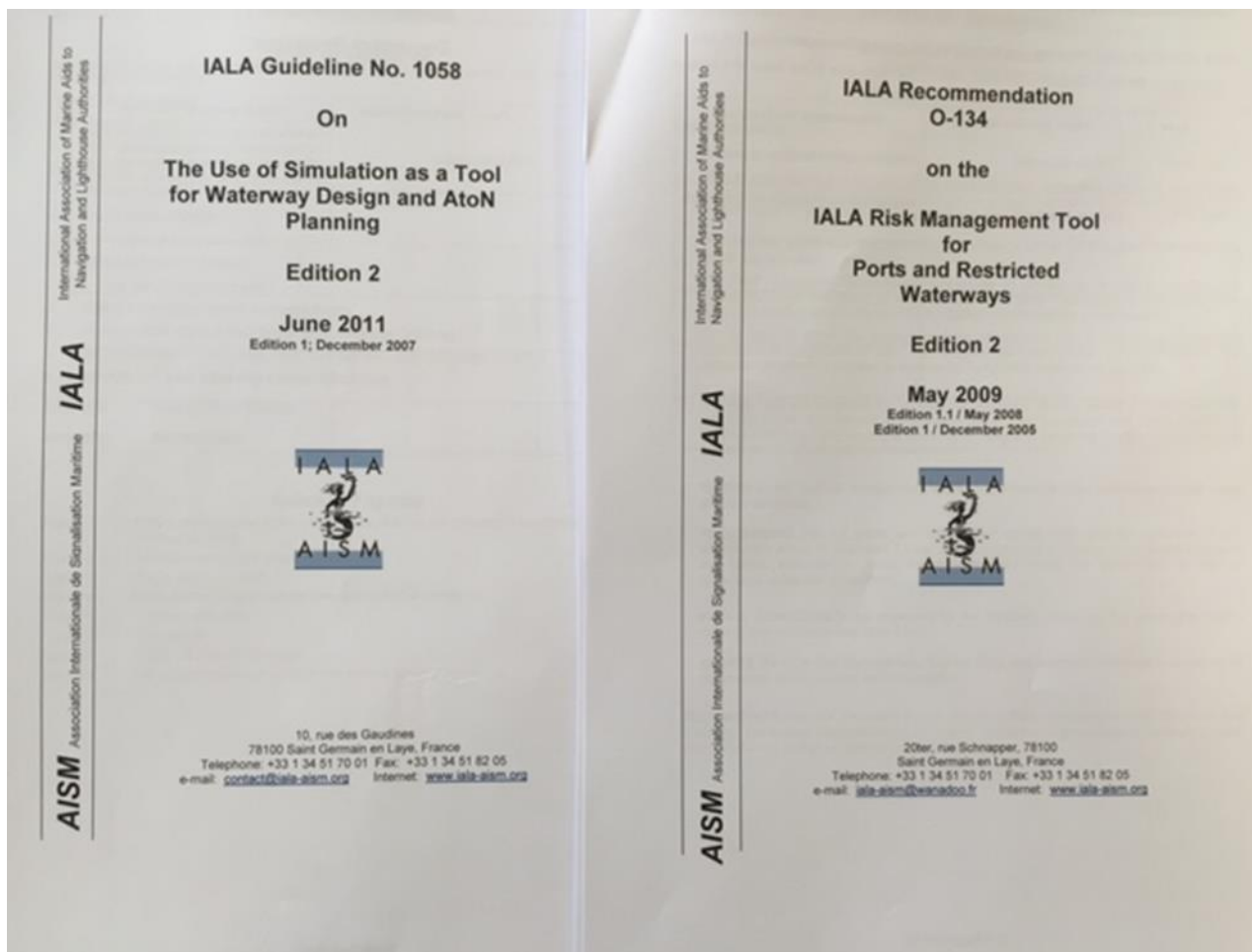
Risk to Navigation

- How to measure traffic volume?
- How to quantify risks?





Recommendations and Guidelines

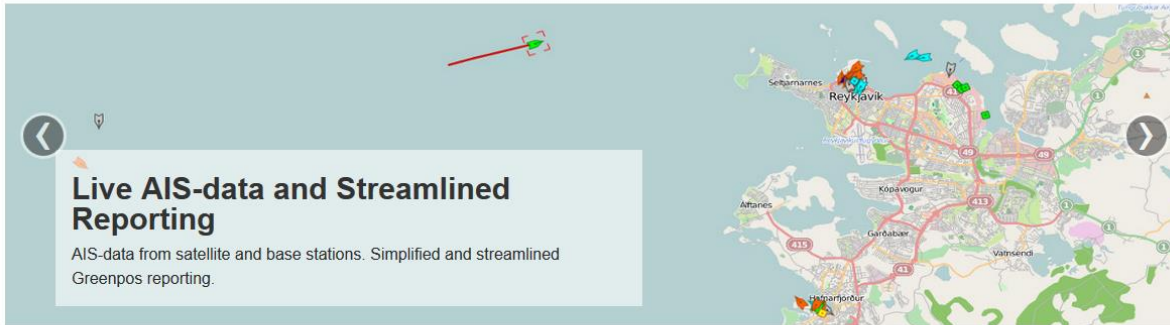




e-Navigation

- Virtual AtoN
- IALA work on e-Navigation





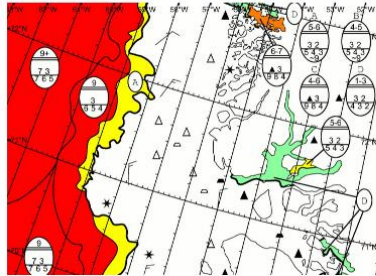
Live AIS-data and Streamlined Reporting

AIS-data from satellite and base stations. Simplified and streamlined Greenpos reporting.

Welcome to ArcticWeb

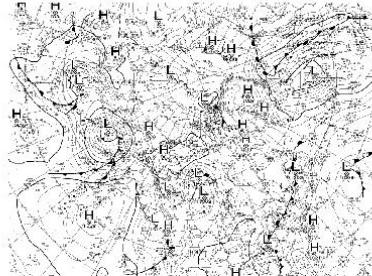
An effort from Danish Maritime Authority to improve maritime safety in the Arctic region. ArcticWeb serves as a single access point to safety related information, provides streamlined reporting and allows for voluntary coordinated voyage through sharing of positions and planned routes. Ships in the area and their organizations may request access via the button below.

[Request Access](#)



Ice Charts

The Danish Meteorological Institute, Greenland Ice Service, collects information regarding ice



Weather

Warnings and forecasts are broadcasted by KNR (Greenland Radio) and Greenland coast radio



Safety of Navigation - Greenland

A safety package containing regulations and information about special Greenland conditions is

Your Ship - ORASILA

AIS Information [view all](#)

MMSI	220443000
Callsign	OYDK2
Country	Denmark
Destination	KYSTFART
Nav status	Under way using engine
ETA	2013-09-28T23:00:35

Reporting

Ship Information	OK	edit
Schedule	OK	edit
Active Route	ACTIVE	deactivate - upload
Greenpos Report	OK	report

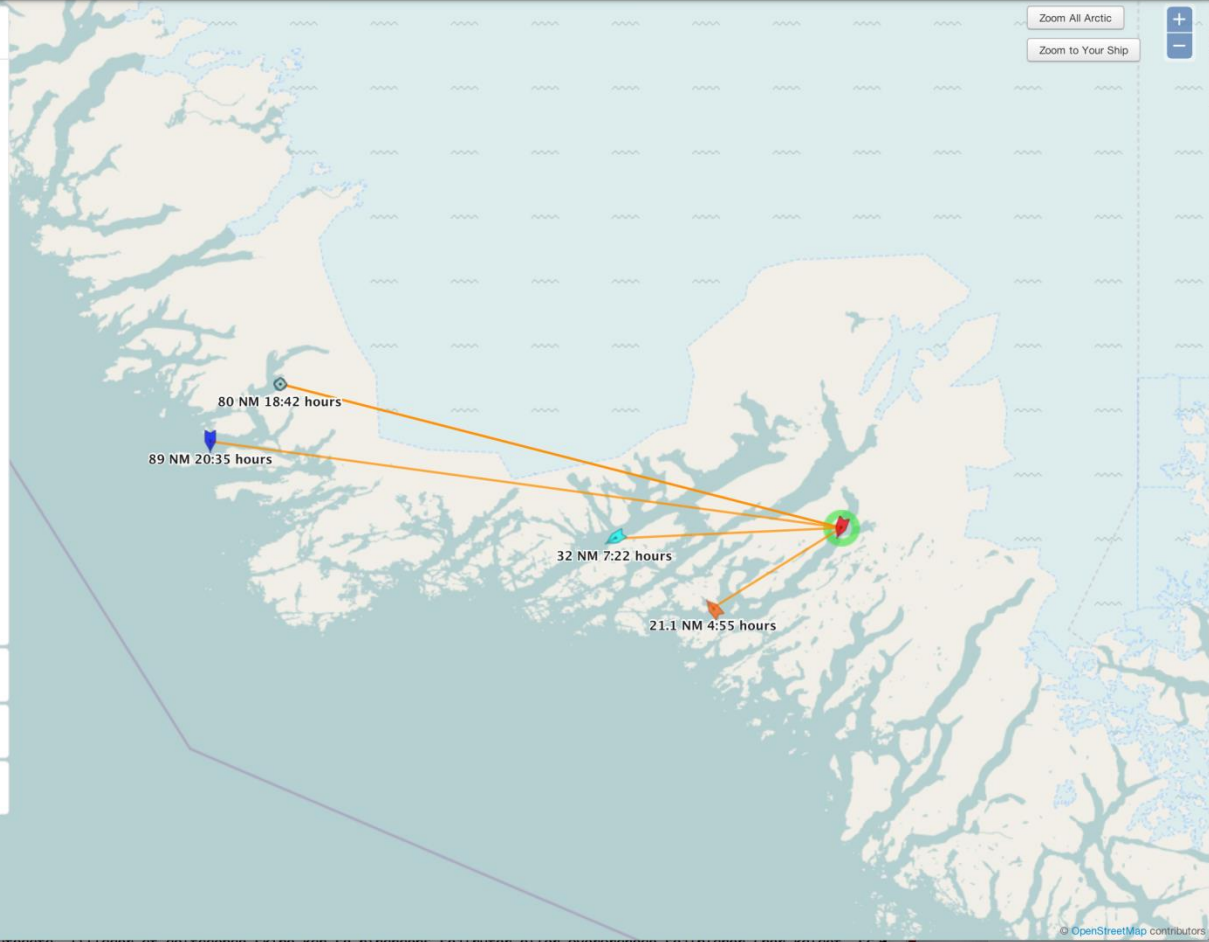
Additional Information

Historical Track	AVAILABLE	view
Nearest Ships	AVAILABLE	view
3-6-9 hour distance circle based on SOG	AVAILABLE	view
METOC	AVAILABLE	view

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
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IALA

QUESTIONS?