



IALA-IHO Seminar on Arctic Navigation

1. Purpose

- To raise the awareness of the needs of maritime safety in the Arctic
- To agree on desirable coordinated action which could be achieved in [five] years on
 - Communications, maritime services and aids to navigation
 - Nautical charting services and hydrography
- To decide on follow up action after the Seminar

2. Organisation of the Seminar

2.1. Name

- “IALA-IHO Seminar on Arctic Navigation”

2.2. Host and location

- IALA Secretariat, St Germain en Laye 78100, France

2.3. Duration and dates

- Two days
- Late spring 2017

2.4. Organisers

- IHO Secretariat
- IALA Secretariat

2.5. Invitees

- The Secretariat of the Arctic Council
- The Secretariat of the Nordic Council of Ministers
- Representatives from IALA National Members of the Arctic Council states
- International organisations
 - IMO
 - WMO
- Other invited organisations
 - Internavigation Research and Technical Centre, Russian Federation (represents Russian Federation at FERNs Council)
 - Others?



3. Draft Objectives and Ongoing Activity after Seminar

IALA-IHO	Objective	Ongoing activity
IALA	Development and coordination of terrestrial radio-navigation systems and resilient PNT services	Request FERNs to consider expanding its role to include the Arctic, possibly via an Arctic WG, and to admit the other Arctic nations. Or if the FERNs politics prevent this, then set up a separate WG within IALA <ul style="list-style-type: none"> • To report to the IALA ENAV Committee • To report to FERNs • And to report to a future Arctic Seminar
IALA	Provision of MSI (MSPs) via space and terrestrial broadcast services, including <ul style="list-style-type: none"> • VDES with satellite down-link • 500Khz and 300KHz (DGNSS stations) • Other including commercial satellite • 	Within IALA ENAV Committee, but with additional workshops or seminars concentrating on progressing this activity
IALA	Harmonisation of national ice-chart services	Special working group. Could be hosted at IALA HQ, but not led by IALA.
IALA	Development of the Danish and Norwegian (and others) Arctic safety services, such as nearby ship information, into a coordinated Arctic-wide system with a common interface.	Special working group. Could be hosted at IALA HQ, but not led by IALA.
IHO	IHO to propose	
IHO	IHO to Propose	

4. Agenda – Day 1

4.1. Opening, Purpose, Situation

- IALA Secretary-General and IHO President open the Seminar
 - Background and purpose of the Workshop
 - Previous IALA meeting of February 2010, and INF paper to IMO
 - Informal Arctic discussions during recent IALA Council meetings
 - IALA technical work to date
- IHO President describes hydrographic status and plans



- survey coverage
- chart coverage
- priorities
- coordination
- WMO sets the climate and weather scene
 - Future trends in weather and climate
- Arctic Council viewpoint
 - Needs identified by the Arctic Council concerning Hydrography, AtoN, maritime services

4.2. Arctic States viewpoints

- Arctic states' views on present status, and the needs for future Arctic navigation

5. Agenda – Day 2

5.1. Expert-led discussion A (IALA)

- Communications, maritime services, and aids-to-navigation
 - Maritime services
 - Vessel tracking
 - Communications challenges, data modelling, and harmonised connectivity
 - Positioning, including visual and electronic aids to navigation
- Aim to have two or three firm action items for IALA

5.2. Expert-led discussion B (IHO)

- Setting priorities / hydrographic risk assessment
- Self-help - crowd-sourcing and data verification
- Multi-disciplinary programmes
- Data discovery and sharing

5.3. Conclusions and closing

- Summary of conclusions
 - Communications, maritime services, and aids-to-navigation
 - Hydrography
- Action items
 - IALA
 - IHO
 - States
- Follow up plan
 - Identify areas where the participants, including IALA and IHO, could work together for the benefit of Arctic navigation safety and efficiency
 - Establish working groups to continue after the Seminar
- AOB



Timetable

Day 1		
Registration		0900-0930
Opening of Seminar	IALA Secretary-General	0930-0950
	IHO President	0950-1020
	WMO	1020-1050
	Arctic Council	1050-1130
Coffee break		30 min 1130-1200
Arctic States viewpoints	Four addresses of 15 min	1200-1300
Lunch	At IALA HQ	80 min 1310-1430
Arctic States viewpoints	Four addresses of 15 min	1430-1530
Coffee break		30 min 1530-1600
Summary and discussion	Led by IALA Secretary-General and IHO President	1600-1630
Day 2		
Expert-led discussion A		0900-1000
Conclusions	Led by IALA	1000-1030
Coffee break		30 min 1030-1100
Expert-led discussion B		1100-1200
Conclusions	Led by IHO	1200-1230
Closing of Seminar and follow-up	IALA Secretary-General	1230-1250
Lunch	At IALA HQ	60 min 1300-1400
Delegates depart		