



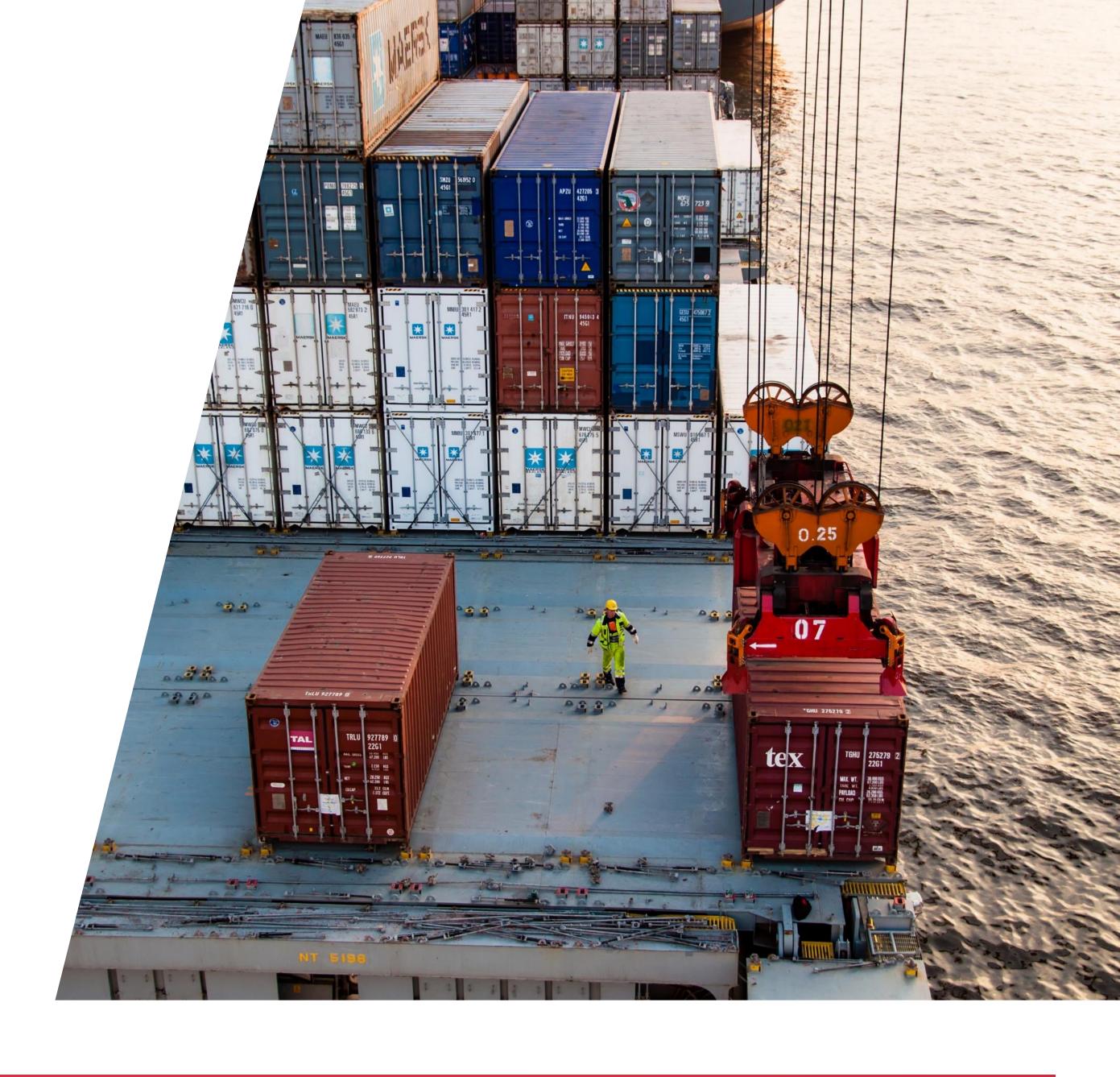
Captain Paul O'Regan President IHMA

IMPA – Rotterdam 2024

Introducing IHMA

The International Harbour Masters' Association is the professional body for those with responsibility for the safe, secure, efficient and environmentally sound conduct of Marine operations in port waters.

With members in more than 50 countries, the Association brings together Harbour Masters and all those who hold a managerial position In aspects of the control of marine operations within a port.

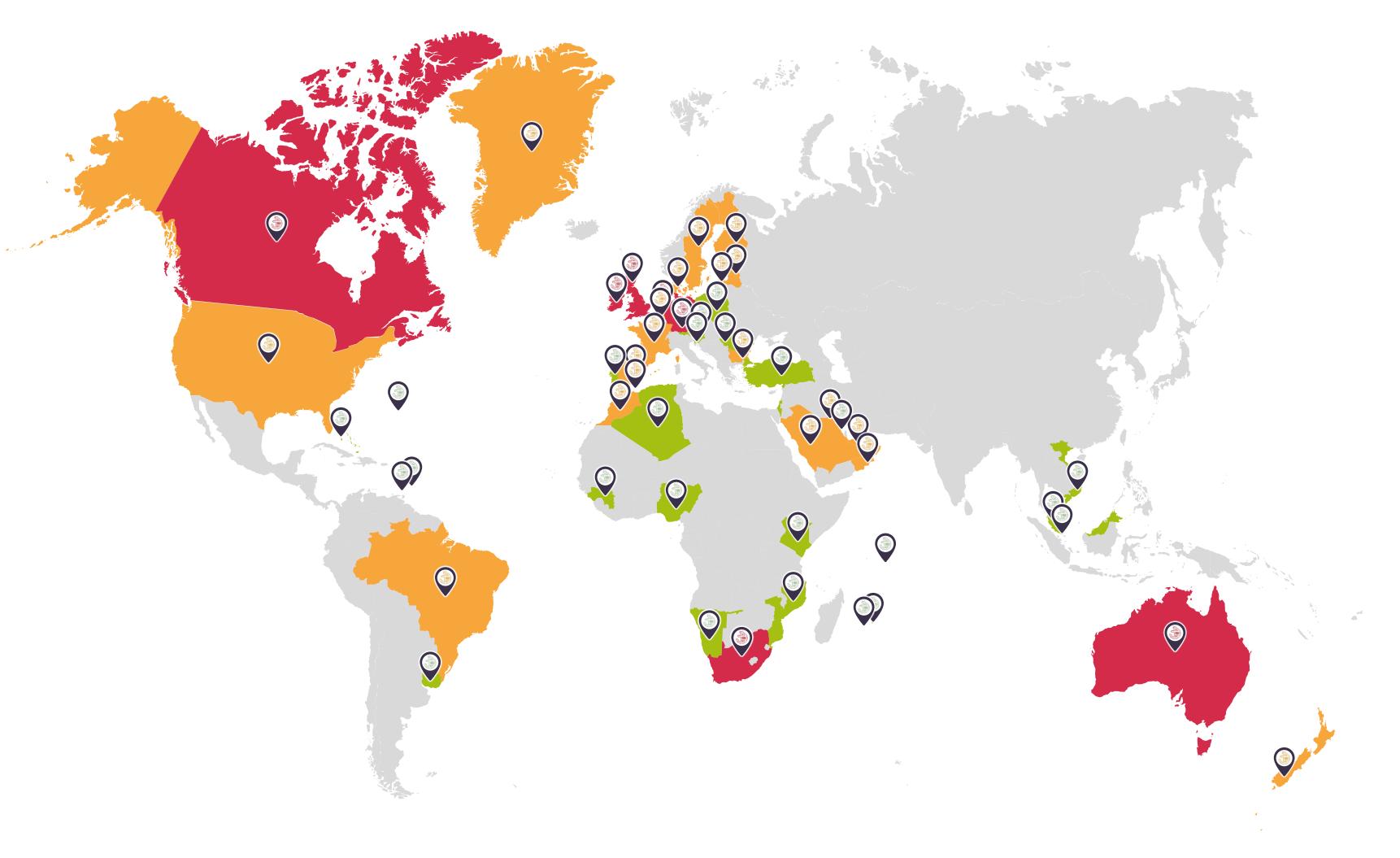




Country Representation

	No. of Representatives
Australia	43
United Kingdom	42
Canada	18
Netherlands	1 <i>7</i>
Ireland	14
Germany	10
South Africa	10
Denmark	9
New Zealand	8
France	8
Sweden	6
United Arab Emirates	5
Belgium	5
Brazil	4
Estonia	4
Bulgaria	3
Finland	3
Latvia	3
Morocco	3
Saudi Arabia	3
Kuwait	2
Spain	2
Oman	2
USA	2
Gibraltar	2
Iceland	2

	No. of Representatives
Singapore	1
Nigeria	1
Bahrain	1
Guinea	1
Uruguay	1
Turkey	1
Mozambique	1
Romania	1
Israel	1
Grenada	1
Malaysia	1
Portugal	1
Kenya	1
Austria	1
Bahamas	1
Algeria	1
Seychelles	1
Namibia	1
Slovenia	1
Mauritius	1
Reunion	1
Vietnam	1
Bermuda	1
Poland	1



10+ representatives

2-9 representatives



1 representative

IHMA Objectives

1

Promote the safe, secure, efficient and environmentally sound conduct of marine operations in ports waters

2

Develop and foster collaboration and good relations among harbour masters worldwide

3

Represent the professional views of harbour masters internationally, regionally, and nationally



Promote the professional standing and interests of harbour masters generally



Collect, collate and share information relevant to the H/M role





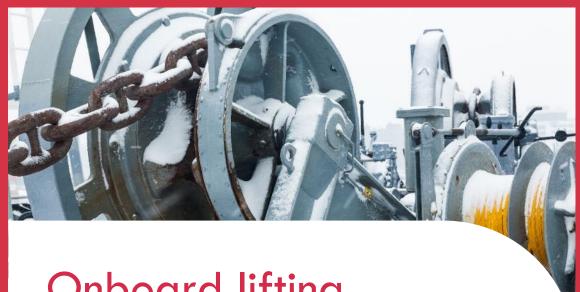




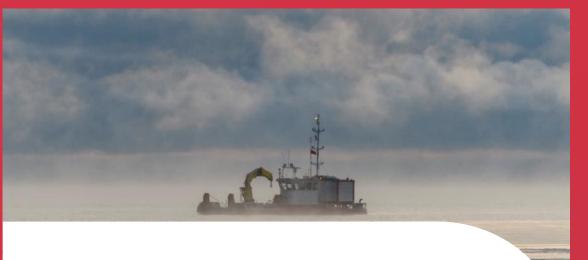




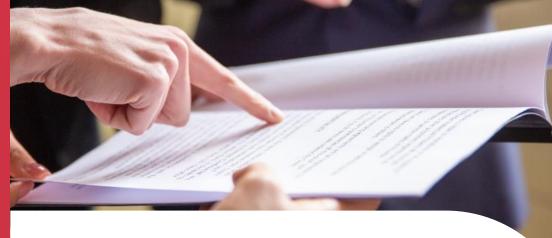
IHMA at IMO, IALA, PIANC



Onboard lifting appliances and anchor handling winches



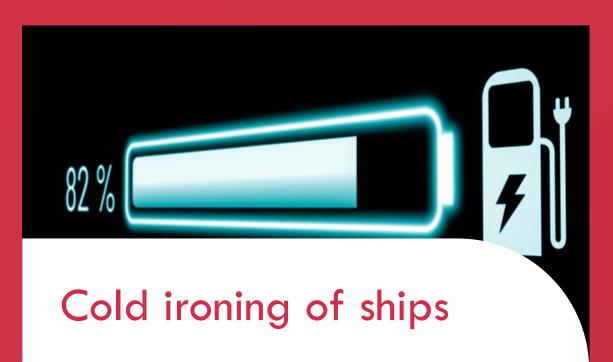
Air pollution and energy efficiency (bunker licensing scheme)



MASS – Maritime Autonomies Surface Ships



Maritime single window





Guidance to address maritime corruption



Safe mooring operations



IHMA and IMPA COLLABORATION

- 1. MEPC 81/6/3 Emerging Risk associated with the use of Shaft powered limitations on ships (ICS, IMPA, IHMA)
- 2. FAL 44/13 IMO guidelines to address bribery and corruption in the maritime sector
- 3. FAL 42/16/3 Impact on global trade, port governance and seafarers. Maritime corruption
- 4. 1. PIANC -EnviCom Working Group 256: Understanding Blue Carbon: a Practical Guide
- Ports and navigation infrastructure and operations, including recreational infrastructure and operations, supported by MarCom and RecCom contributions



International Occupational Standards

IHMA recognises thirteen
International Occupational
Standards (IOS) for
Harbour Masters.





- Develop & operate marine enforcement policy
- Report & investigate marine incidents
- Determine the need for a port pilotage service
- Determine the need and scope of port VTS services
- Manage conservancy
- Manage marina and port recreational services
- Plan for and manage port emergencies
- Manage the port marine environmental status
- Manage port security
- Manage marine employees and workplace H&S
- Contribute to port management



Harbour Masters – Training & Qualifications



STCW OR EQUILIVENT (MOST CASES)

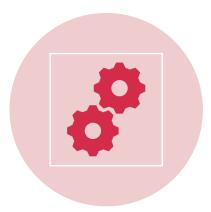
- IMO RESOLUTION A.960 (4 PAGES)
- ISPO STANDIZATION AND RECGONITION
- PORT/PILOTAGE AREA SPECIFIC

• HARBOUR MASTER

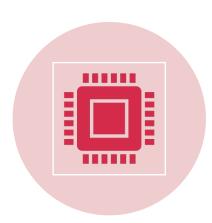
- Qualifications and requirements are varied. Class1 Masters to No formal qualification
- Diploma for Harbour Masters (Lloyds Maritime Academy)
- The Harbour Master Certificate (HM Certificate) was developed by Port Skills and Safety and the UK Harbour Masters Association (UKHMA)



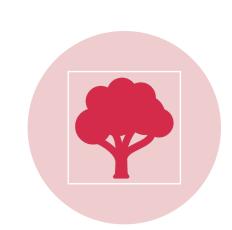
Key Challenges Facing Port Management



Automation and
 Digitisation - vast gaps in adaption to modern technology



Cyber Security and
Physical Security — As
we move towards Al
integration



Environmental
Sustainability –
managing port
operations and
shipping



Regulatory Compliance – ever increasing administration workloads, less time on practical issues



Labour force and skill deficits — to match the pace of innovation



Larger vessels Vs ageing infrastructure



Port Safety – Vessel Standards



Community and Stakeholder engagement



FUTURE CONNECTED PORT







THE S-100 PRODUCTS: S-131 MARINE HARBOUR INFRASTRUCTURE

International Hydrographic Organization

S-131

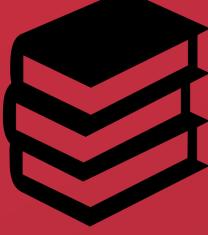
- S-131: Marine Harbour Infrastructure
- Dual purpose:
 - assisting data exchange
 - distribution to end users
- Development underway by S-131 project team under the IHO Lab

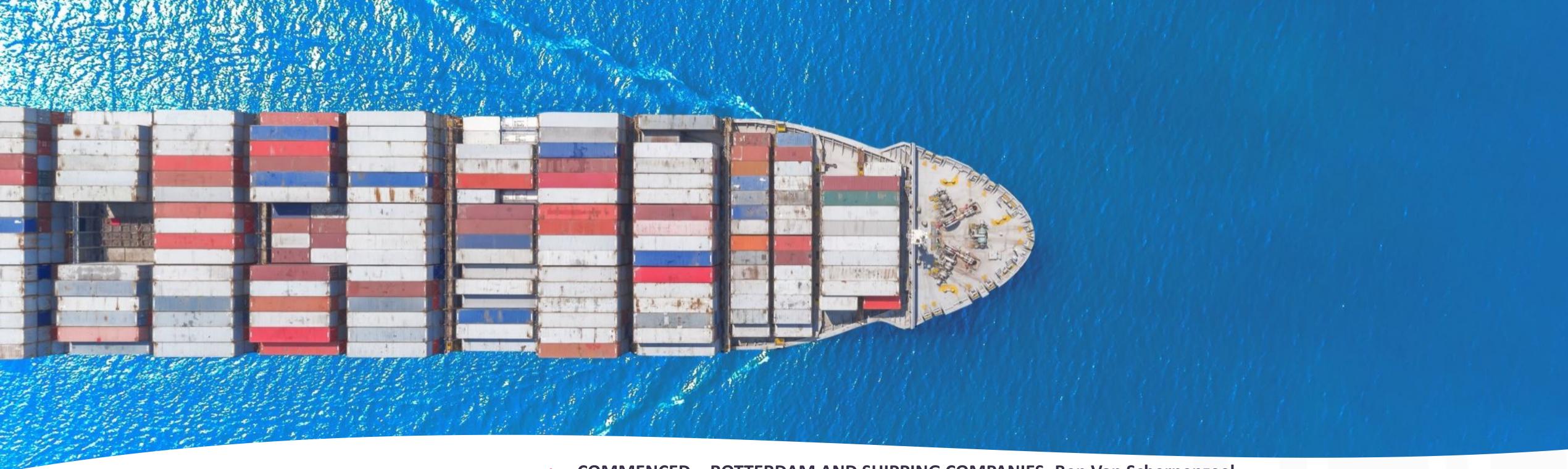






PORT INFORMATION AND DATA EXCHANGE





Port Call Optimization Taskforce

- COMMENCED ROTTERDAM AND SHIPPING COMPANIES- Ben Van Scherpenzeel
- AIM to improve and standardize wherever feasible the exchange of nautical, administrative and operational data between ship and shore,
- This exchange of standardised quality data will support a much more accurate Just in Time Arrival (JIT) process, which aligns and supports the IMO initiatives on decarbonisation.
- 2. When is the berth position safe
- 3. When is the port passage safe
- 4. When is the berth position available
- 5. When is the port passage available



INDUSTRY PARTNERS

INTERNATIONAL TASKFORCE PORT CALL OPTIMIZATION

Industry partners; shipping and agents



CMA CGM

Line and Agency





Inchcape

Shipping Services





OLDENDORFF 4

Maersk

MSC Mediterranean Shipping Company S.A and Agency

Oldendorff Carriers







Vopak Agents

Shipping and their agents identify the exact areas in shipping business processes that will be optimized when different types of information are provided and shared.

Industry partners; ports



Port of Algeciras



PORT OF KOKKOLA

MPA

Port of Singapore

















Montes del Plata



Port of

Port of Rotterdam

Rotterdam

Port of Kokkola



Ningbo Zhoushan











Port of Tanger Med

Hamburg Vessel Coordination Center

HVCC

Ports and their service providers (e.g. terminals, bunkers, pilots) identify how to achieve high quality data.

Standard partners





UK Hydrographic Office

ENDORSERS









BIMCO

International Association

of Ports and Harbours

International Harbour

Masters Association

Made Smart Group

STM

Sea Traffic Management

Chainport

Dry Bulk Terminals

Green Award Foundation

IALA



ICHCA





International Chamber of Shipping



International Federation of Ship's Masters' Associations







INTERCARGO



Lloyds Marine Intelligence Unit









Navelink

PortXchange



MarineTraffic





by Thomas Miller

International associations are invited to endorse the standards of IHO, IMO and ISO





PORT INFORMATION MANUAL

Version 1.4.5





2008....
2019 - IMO
MEPC.323(74): call
for action to
improve quality and
availability of data
in ship-port
interface



IHMA

Accurate and Updated Port Information



PORTOF CORK
INFORMATION
International Harbour Masters Association
ANUAL

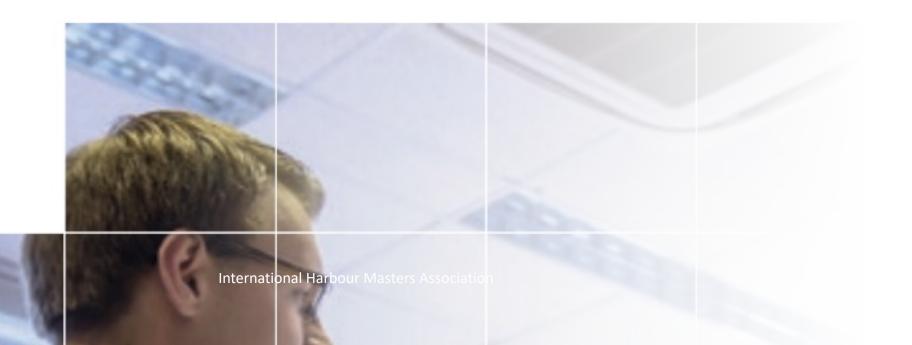




Harbour Masters' guide to hydrographic and maritime information exchange

Developed by the United Kingdom Hydrographic Office and the UK Harbour Masters' Association

UKHO& UKHMA



AVANTI

- AVANTI ensuring a ship has sufficient nautical information up front to make its port call by improving the
- quality and availability of global nautical data such as correct depths, berth and port information
- AVANTI is an initiative of the maritime industry, the International Harbour Masters' Association (IHMA) and the United Kingdom Hydrographic Office (UKHO)
- Mariners Handbook





NEXT STEPS

- "Guide to Nautical Port Data"
- be in a position to advance it further for populating data fields for S-57 ENC's which will be in use beyond 2030, second populate data fields for S-101 ENC's

Guidelines for Harmonized Communication

and

Electronic Exchange

of

Nautical Data for Port Calls©

Version 2.0

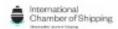
CONCEPT



















FUTURE CONNECTED PORT

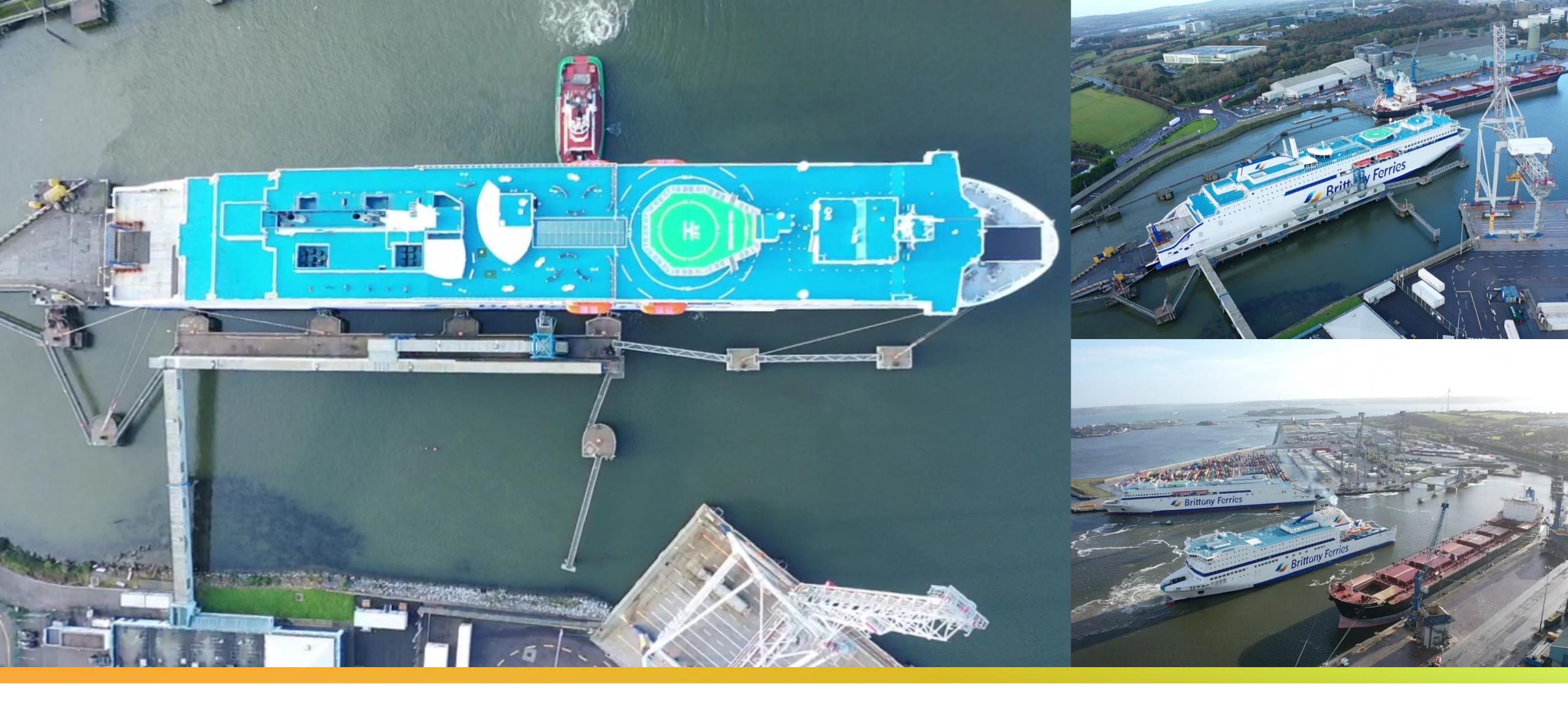




PORT MANAGEMENT INFORMATION SYSTEMS

- RAPIDLY EVOLVING WITH INTEGRATED AI TECHNOLOGY
- AT THE CORE OF MANAGING PORT SERVICES
- ABILITY TO PUSH OUT LARGE AMOUNTS OF DATA WHAT DO WE NEED? WHAT DON'T WE NEED?
- ABILITY TO MANAGE JIT ARRIVALS

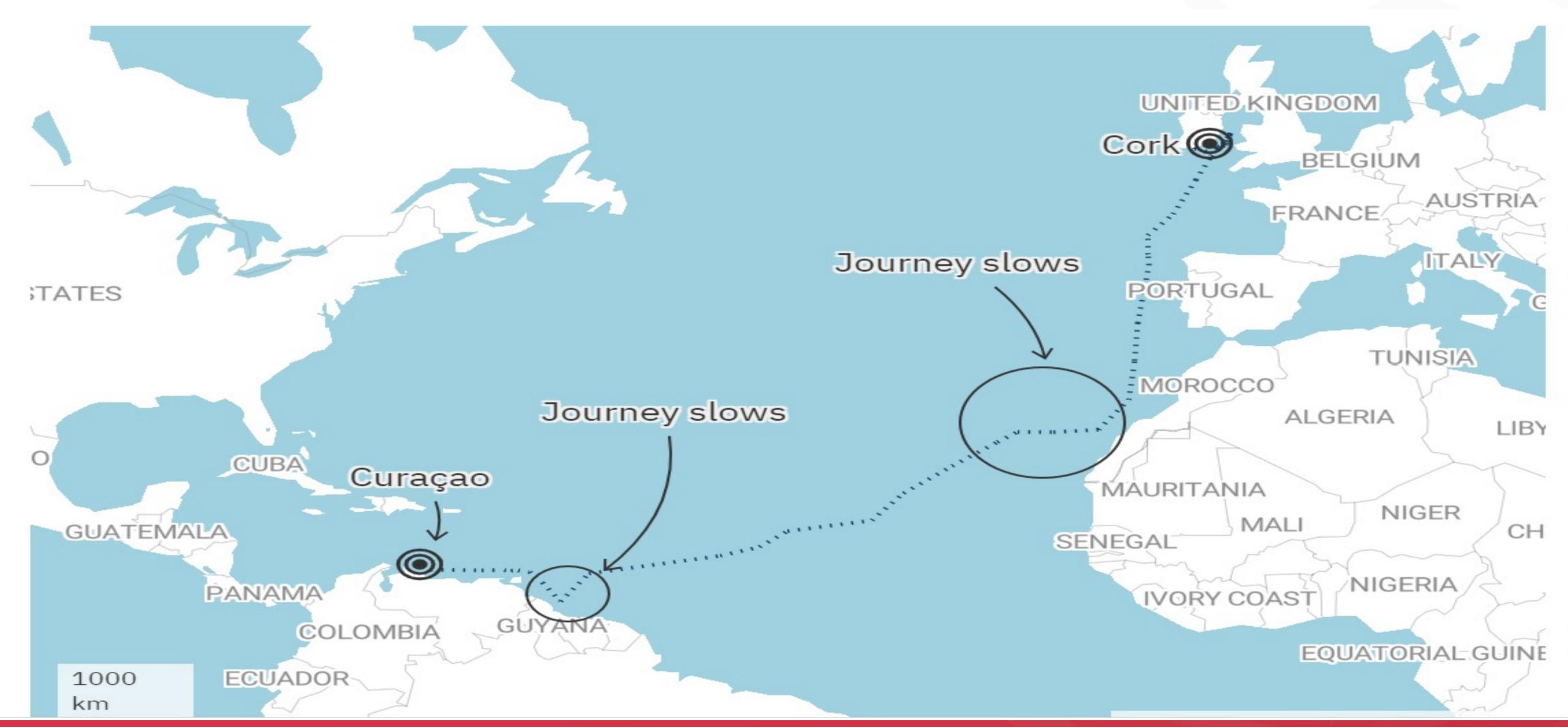
• Ports use digital AI technologies for system automation, safety and security improvements, vessel route, vessel turnaround time, and container dwell time optimization. As well as for accurate estimated time of arrival forecasts, real-time performance forecasts, and to create a Digital Twin of their port (a real-time digital representation of the port operations)



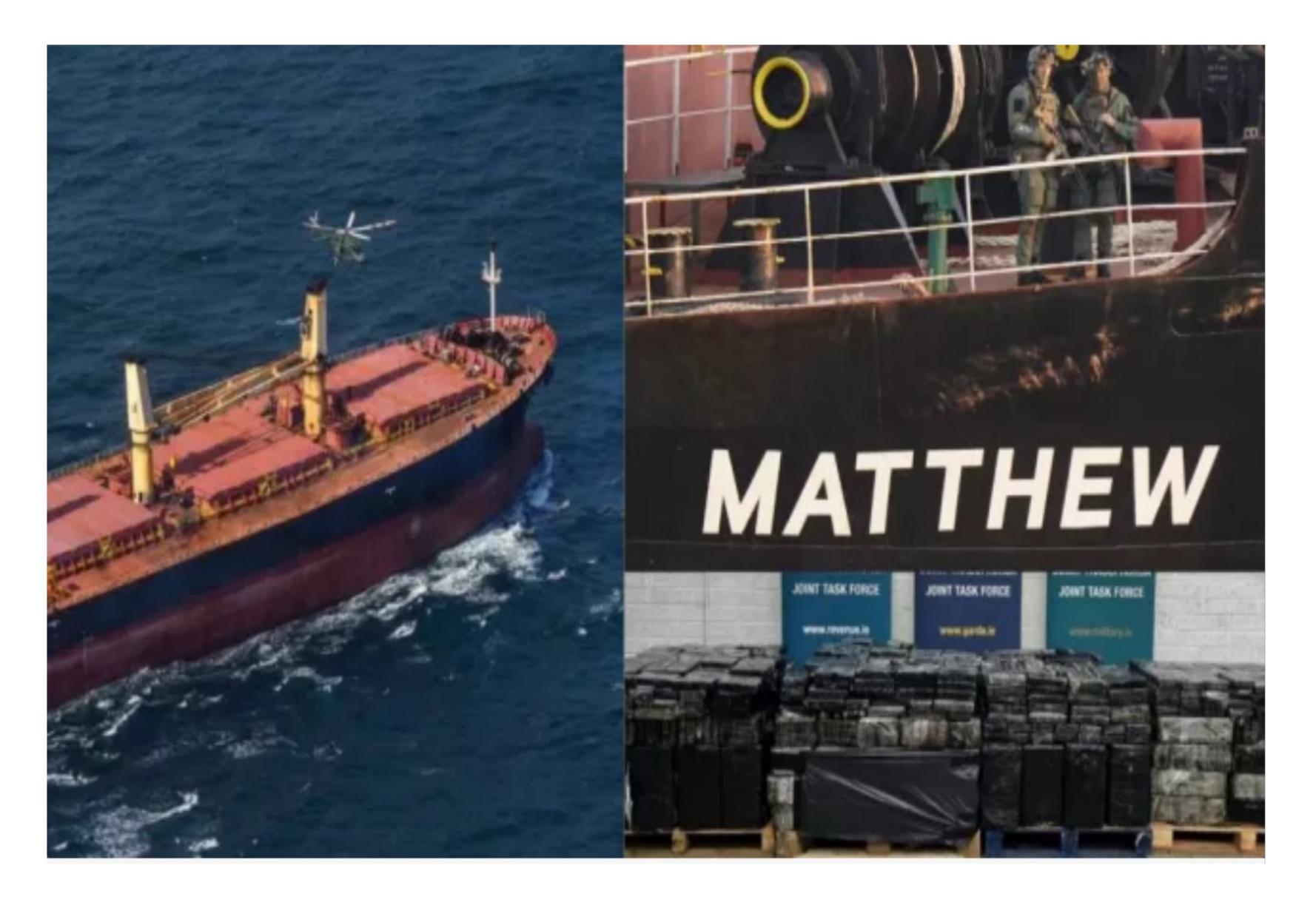
REALITY



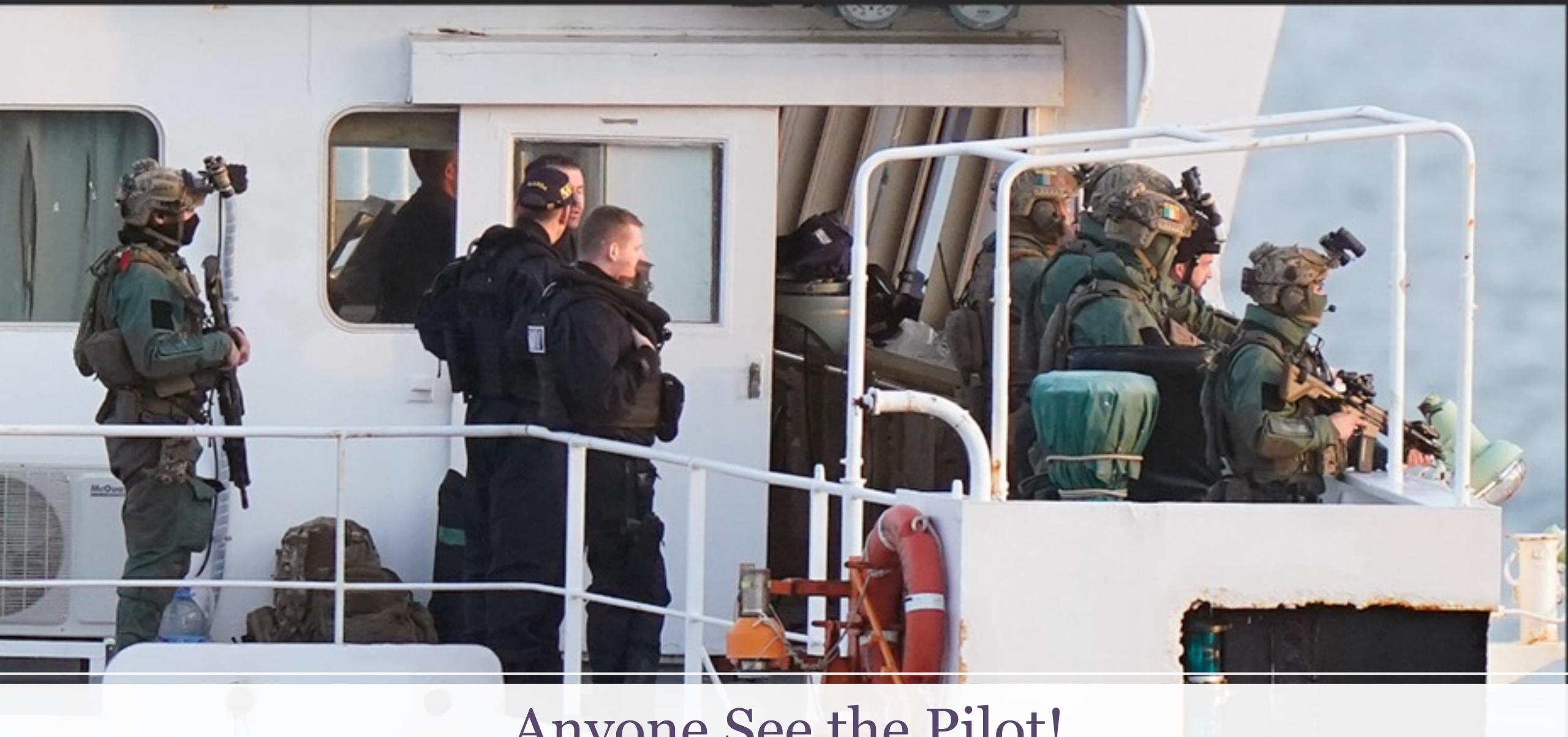
CURACAO TO CORK







MV MATTHEW



Anyone See the Pilot!



Thank you for listening

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www.harbourmaster.org

