

- Port Call Optimization
- Ben van Scherpenzeel
- Chair of International Taskforce Port Call Optimization
- Presentation to SELA
- Marcy 17 2022

International Taskforce



Port Call Optimization

Who is International Taskforce Port Call Optimization?

The Taskforce:

- Started in January 2014
- Comprises subject matter experts with hands on expertise in shipping, ports and standards
- Works together with Non-Governmental Organizations to make submissions to robust standardization bodies to improve and formalize existing industry practices
- Provides input to Chainport, DCSA, IAPH Data Collaboration, IMO GIA to Support Low Carbon Shipping, World Bank, WPCAP
- As a neutral body, consults but does not promote solution providers

INTERNATIONAL TASKFORCE PORT CALL OPTIMIZATION

Industry partners; shipping and agents



Standard partners



Industry partners; ports



ENDORSERS



Why did we start?

Initiator:

- Request from shipping to improve port call data quality and availability to IHMA

Followed by:

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



RESOLUTION MEPC.323(74)
(adopted on 17 May 2019)

**INVITATION TO MEMBER STATES TO ENCOURAGE VOLUNTARY COOPERATION
BETWEEN THE PORT AND SHIPPING SECTORS TO CONTRIBUTE TO REDUCING
GHG EMISSIONS FROM SHIPS**

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution from ships,

HAVING ADOPTED resolution MEPC.304(72) on the *Initial IMO Strategy on reduction of GHG emissions from ships* (hereinafter the Initial Strategy),

NOTING that the Initial Strategy calls for the encouragement of port developments and activities globally to facilitate reduction of GHG emissions from shipping, including provision of ship and shoreside/onshore power supply from renewable sources, infrastructure to support supply of alternative low-carbon and zero-carbon fuels, and to further optimize the logistic chain and its planning, including ports,

Why is port call data important?

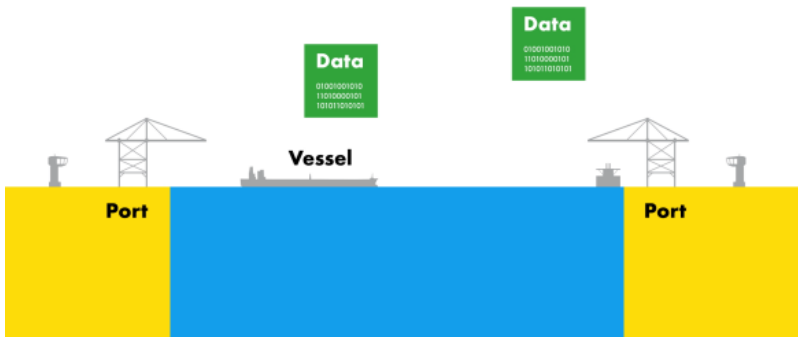
- To improve safety, security and environmental performance to address financial concerns, and encourage innovation and efficiency (IMO)
- Most cost-efficient way to do it, to ensure global outreach



What is the scope of port call data?

Focus: movement of the vessel:

- Realizing safe and sustainable berth to berth navigation
- Important for shipping, shippers, terminals and ports



Related: movement of the vessel's cargo:

- Realizing reliable and sustainable end to end supply chain
- Important for shippers



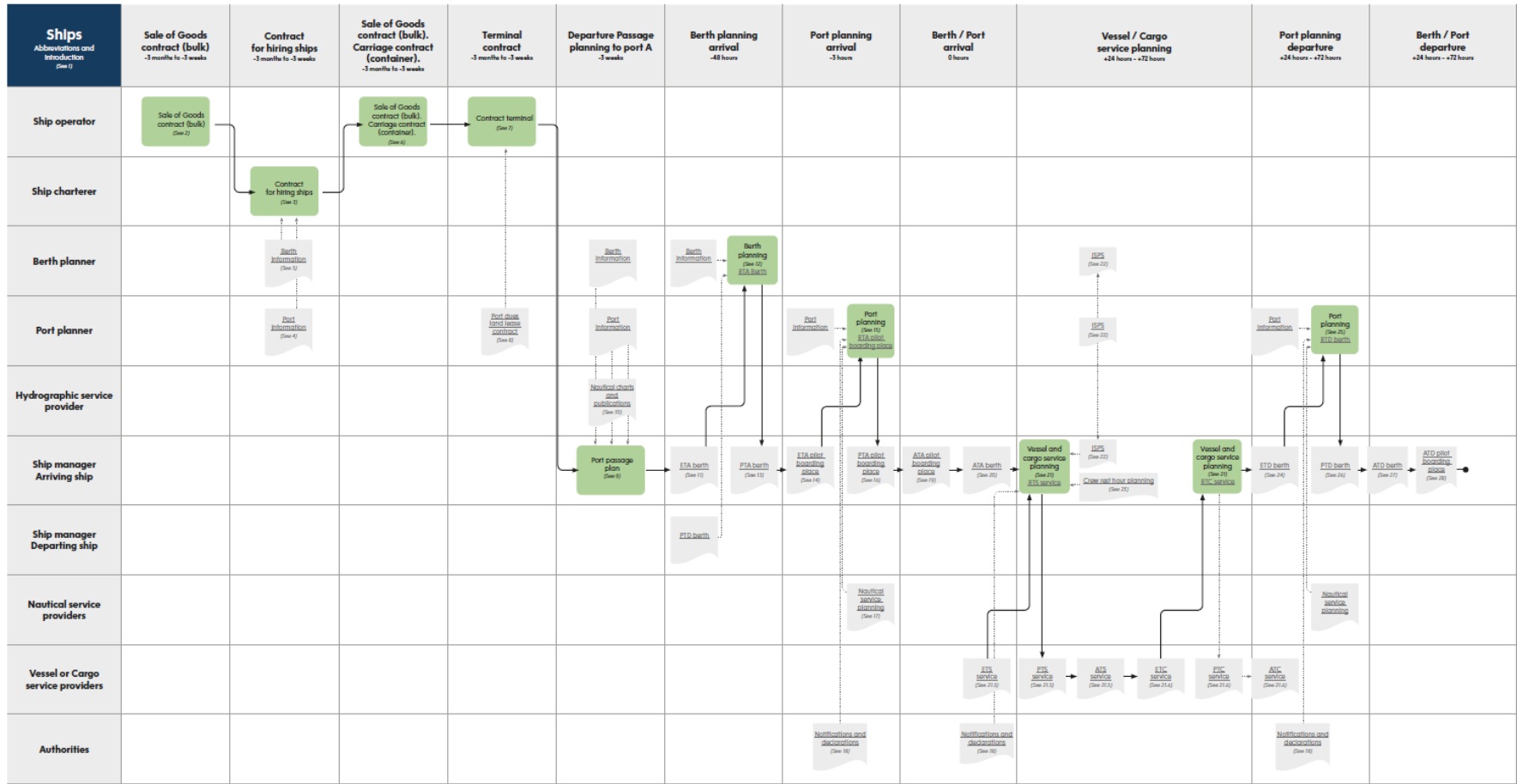
Road map Port Call Optimization

- 1) **Agree on business process of port calls**
- 2) Agree on minimum scope of data
- 3) Agree on robust standardization bodies
- 4) Agree on non-technical standards
- 5) Agree on technical standards
- 6) Develop incentives for data owners
- 7) Develop guidance for data owners
- 8) Implementation



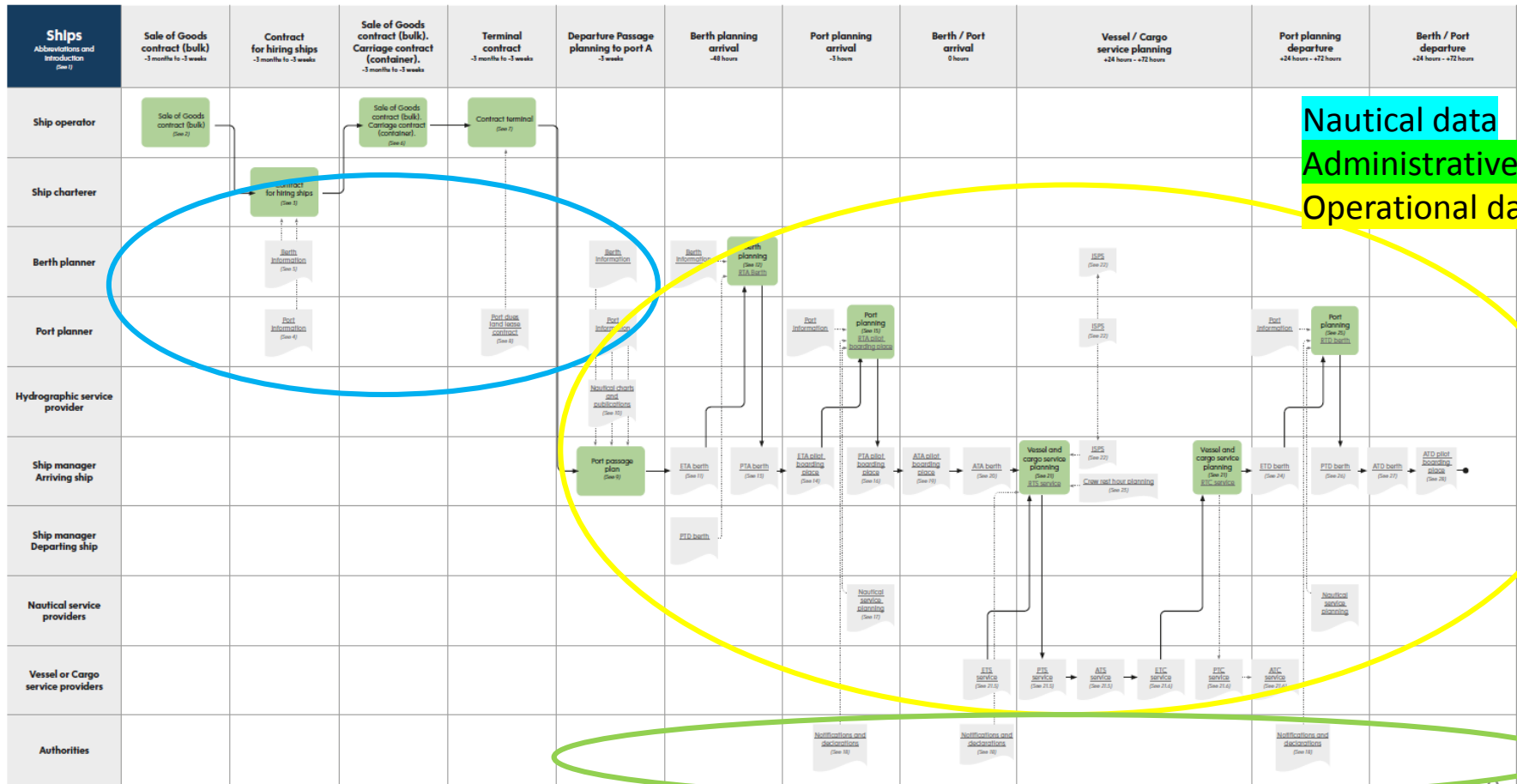
Agree on business process of port calls

Based on IMO resolutions and BIMCO contracts, trade and port agnostic



Agree on business process of port calls

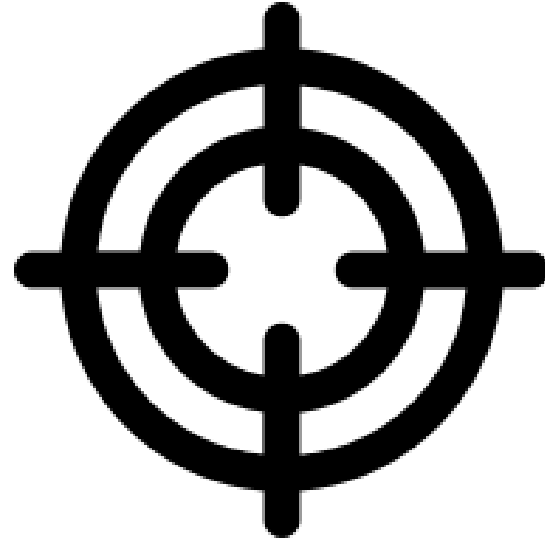
Identified data sets based on IMO resolutions and BIMCO contracts



Nautical data
Administrative data
Operational data

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Agree on minimum scope of data

Data set elements

Nautical data

- a) Port infrastructure in Nautical Charts and Sailing Directions
- b) Port depths in Nautical Charts
- c) Port information in Sailing Directions

Administrative data

- a) FAL data in notifications and declarations
- b) Port facility data in IMO GISIS

Operational data

- a) Arrival and departure times at berth and pilot boarding place
- b) Starting and completion times of vessel and cargo services

Agree on minimum scope of data

Data set elements based on use cases with most impact on IMO objectives according SME's of ITPCO & IMO GIA sessions

Nautical data

- a) Berth to berth navigation is difficult if local ID of terminal or berth is different from Nautical Charts or Sailing Directions
- b) Optimization of deadweight and safe UKC is difficult if local depths are different from Nautical Charts
- c) Berth to berth navigation is difficult if local Port Information Books are different from Sailing Directions

Administrative data

- a) Reporting notifications and declarations is an administrative burden when data cannot be exchanged but must be re-typed in different formats
- b) Reporting ISPS is difficult if the data of the Port Facility in the Nautical Chart is different from IMO GISIS data base

Operational data

- a) Optimization of speed and planning rest hours is difficult if the Requested Time of Arrival Pilot Boarding Place or Departure Berth are not available
- b) Just In Time Arrivals or planning of rest hours is difficult if the start and completion times of services are not available

Agree on minimum scope of data

Data set elements based on being compliant with IMO: most ports are public ports governed by IMO Member States

Nautical data

- a) To be compliant with IMO Resolution A.893(21)
- b) To be compliant with IMO Resolution A.893(21)
- c) To be compliant with IMO Resolution A.893(21) and A.862(20)

Administrative data

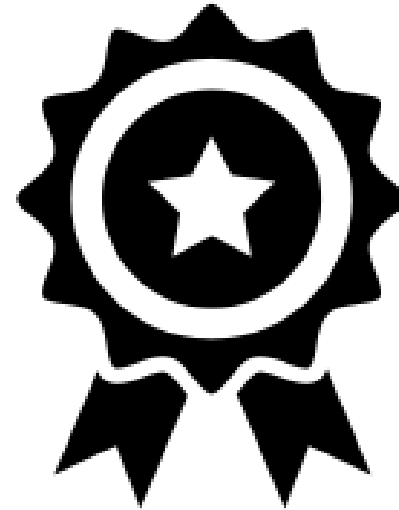
- a) To be compliant with IMO FAL Convention to exchange FAL data electronically
- b) To be compliant with IMO SOLAS Regulation XI-2/13.4

Operational data

- a) To be compliant with IMO MEPC.304(72) and MLC
- b) To be compliant with IMO MEPC. 304(72) and MLC

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Agree on robust standardization bodies

For non-technical standards: are we talking about the same object, what is relation between data elements

Nautical data



- From the start assigned to set standards for nautical publications
- Being robust party for both shipping and ports; has 93 Member States

Administrative data



- From the start assigned to set standards for notifications and declarations
- Being robust party for both shipping and ports; has 174 Member States

Operational data



- Time stamps serve both administrative and operational data, it is common sense to develop them under the same body and build on existing work

Agree on robust standardization bodies

For technical standards: API specifications, technical and business performance requirements

Nautical data



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- Being robust party for both shipping and ports; has 93 Member States

Administrative data



- ISO 28005-2 is the data model for the FAL Convention, aligned with IMO Model

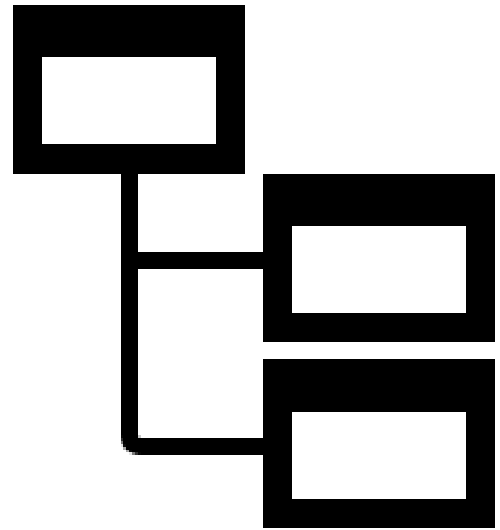
Operational data



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Agree on non-technical standards

Accomplishments

Nautical data

- a) Terminals, berths and berth positions defined in Guide for Nautical Data
- b) Maintained depths, UKC, vertical tide defined in Guide for Nautical Data
- c) Guide for Nautical Data aligned with IMO Resolution A.862(20) content and IHO standards

Administrative data

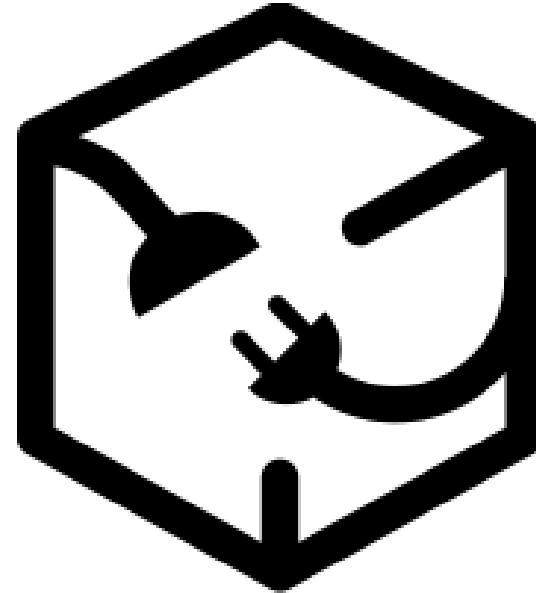
- a) Not in scope for ITPCO
- b) IMO Port Facility No. part of Guide for Nautical Data

Operational data

- a) Arrival/departure times in Guide for Operational Data
- b) Starting/completion times in Guide for Operational Data

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Agree on technical standards

Accomplishments

Nautical data

- Exchange with S-57 tested
- Development of S-131 started

Administrative data

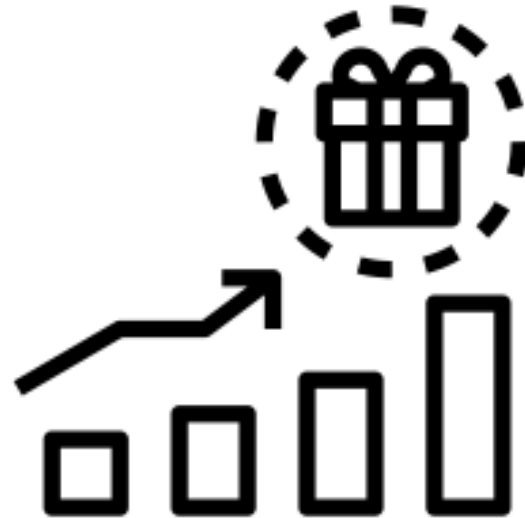
- Development under ISO TC 8 started (IMO FAL 45/6/6)

Operational data

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Develop incentives for data owners

To do

Nautical data

- Close gap in SOLAS
- Update Port Support Services
- Recognition from IHO / IMO

Administrative data

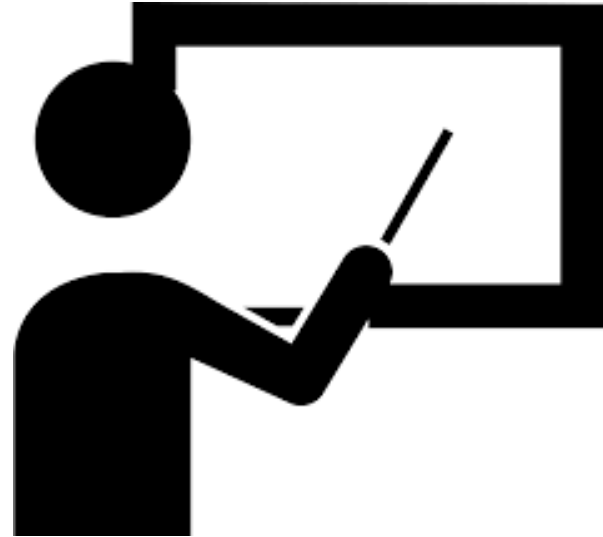
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Operational data

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Develop guidance for data owners

To do

Nautical data

- IHO Guide for nautical data

Administrative data

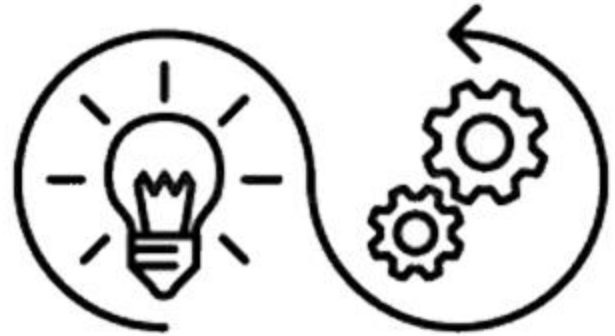
- IHO Guide for port facility data

Operational data

- IMO Guide for operational data

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Implementation

To do

Nautical data

- First port has finalized Q4/22

Administrative data

- First MS for FAL data?
- First port for port facility data Q4/22

Operational data

- First port has finalized Q4/22

Hope to welcome you on board

