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
- Works together with other port call optimization initiatives
- As a neutral body, consults but does not promote solution providers

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

International Harbour Masters Association

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,

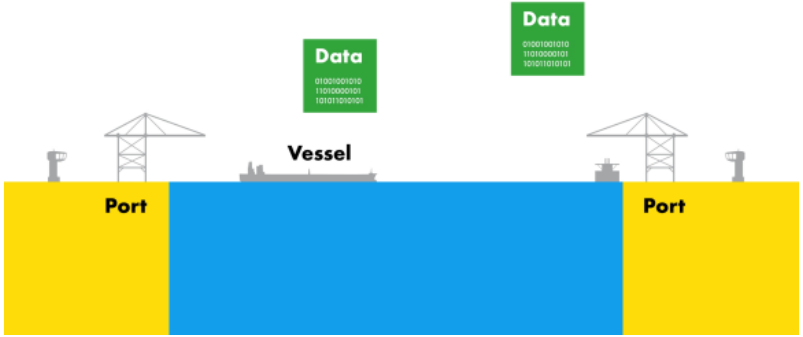
Why is port call data important?

- 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

Why is the data owner important?

- Port call data from data owner is up to date and validated during daily operations
- Data owner for berth approaches (depths, pilot boarding time) is from port planner
- Data owner for berths (depths, berthing time) is from berth planner

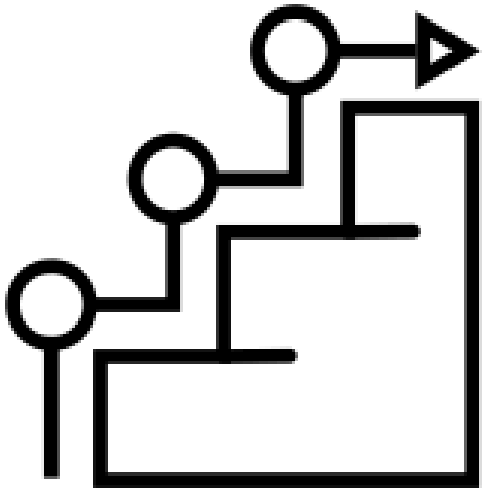
Why is a global approach important?

- Data owners like to share data one to many globally, to minimize administrative burden, errors and delays in updates
- Ports sharing data one to many: they can receive up to 98.000 (2) different ships
- Shipping sharing data one to many: they operate in a global network of up to 8.000 (1) different ports

(1) LloydsMaritime Atlas (2) UNCTAD report ship of more than 100 GT

Why is a step-by-step implementation important?

- Many ports and terminals use national / local / company standards for many years; switching over to international standards cannot happen overnight
- A first step is to have the data in international standards, but the information in local standards
- Again: a small step is already a big effort!



For a global approach, we need a strong and global road map

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

Road map Port Call Optimization

1) **<u>Agree on business process of port calls</u>**
2) Agree on minimum scope of data
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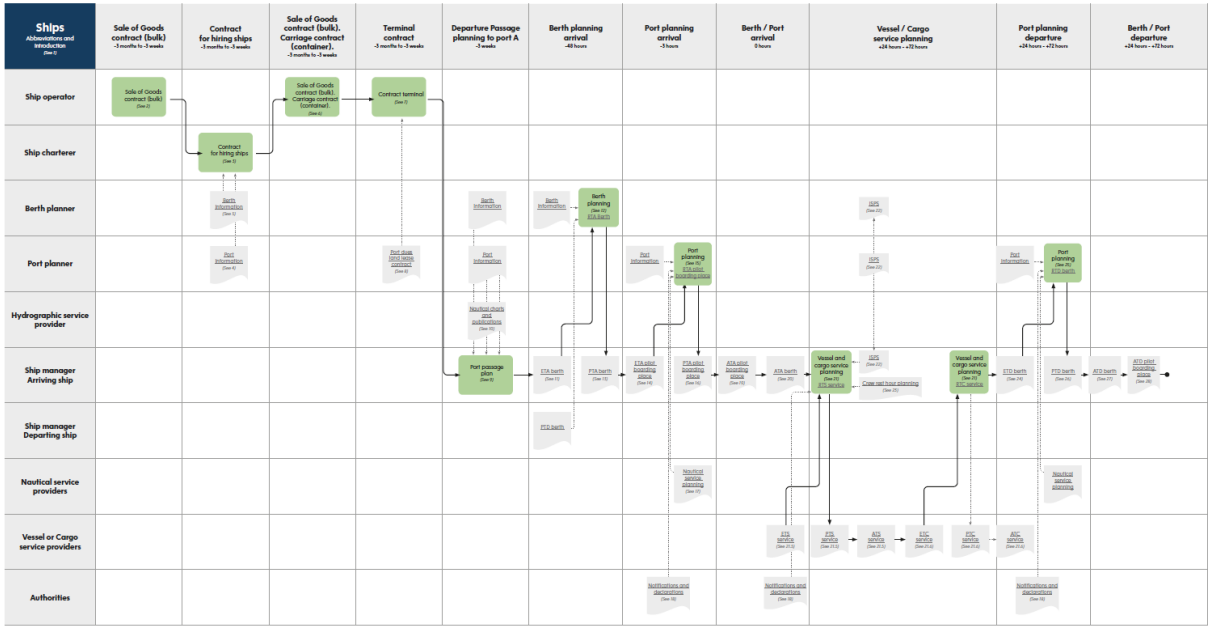
1) Agree on business process of port calls

Accomplishments: port and trade agnostic business process and appendix; identification of data ownership



Appendix to Port Call Process

Last update July 18 2022

International Taskforce

Port Call Optimization

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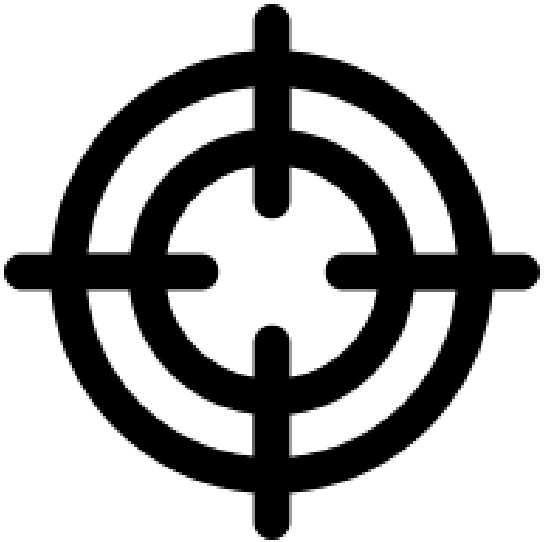
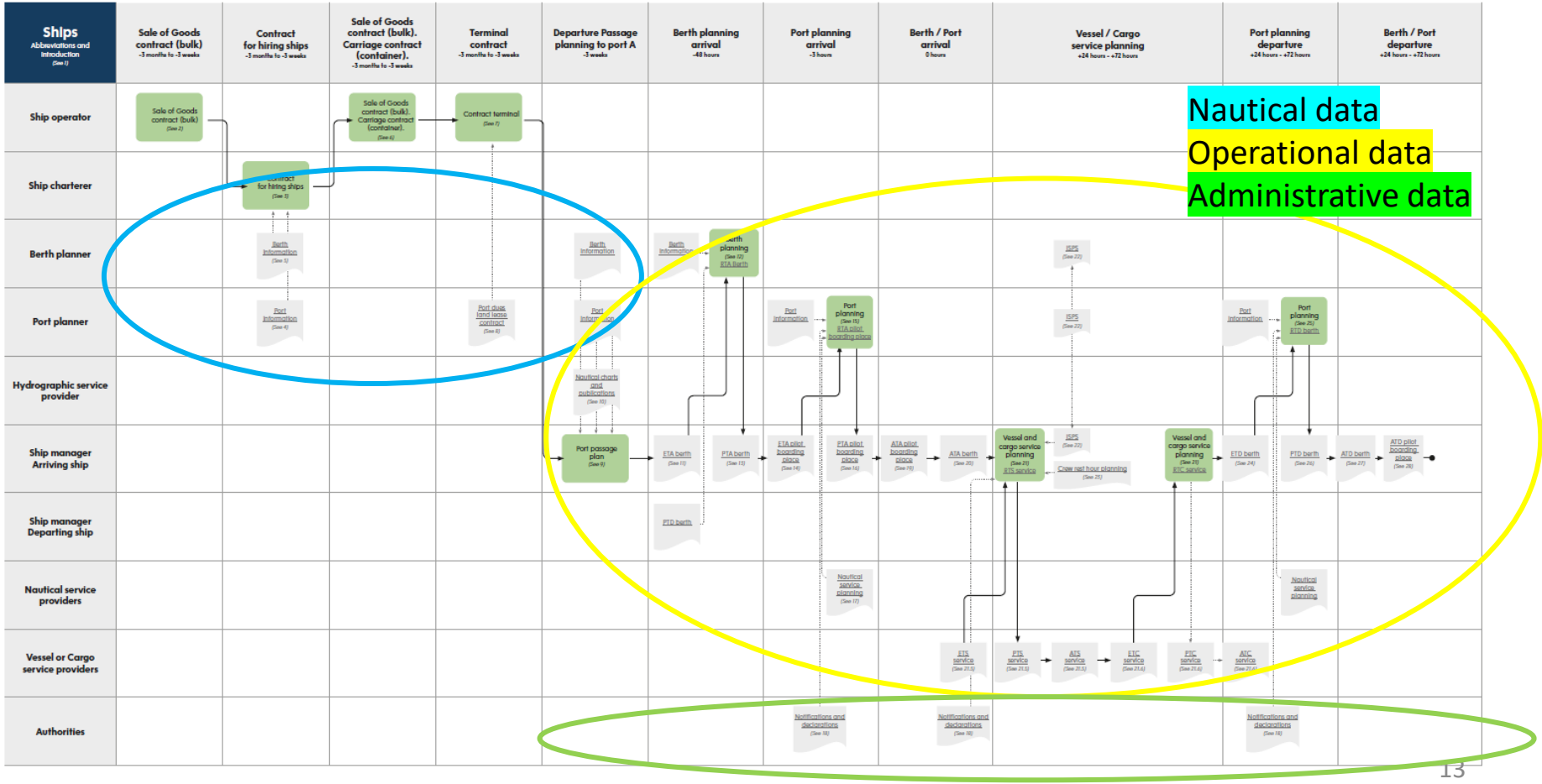


2) Agree on minimum scope of data

Accomplishments: identified data sets based on IMO resolutions and BIMCO contracts



2) Agree on minimum scope of data

Accomplishments: identified data sets – IMO FAL 46/5/1

Nautical data

- Data that are provided by hydrographic offices or similar service provider that is used in safe navigation

Operational data

- Data that are submitted to non-authority parties as part of planning or execution of certain operations

Administrative data

- Data that are submitted by ships or other non-authority parties to authorities based on legislation or regulations

2) Agree on minimum scope of data

Accomplishments: identified data elements within data sets

Nautical data

- Port depths and water levels
- Port infrastructure
- Port information

Operational data

- Arrival / Departure times at berth and pilot boarding place
- Starting / Completion times of vessel and cargo services

Administrative data

- IMO FAL forms data

2) Agree on minimum scope of data

Accomplishments: rationale based on being compliant with IMO (most ports are public ports governed by Member States)

Nautical data

a) Port depths and water levels: to be compliant with IMO Resolution A.893(21)

b) Port infrastructure: to be compliant with IMO Resolution A.893(21)

c) Port information: to be compliant with IMO Resolutions A.893(21) and A.862(20)

Operational data

a) Arrival / Departure times: to be compliant with IMO MEPC.304(72) and MLC

b) Starting / Completion times: to be compliant with IMO MEPC. 304(72) and MLC

Administrative data

a) IMO FAL Forms: to be compliant with IMO FAL Convention

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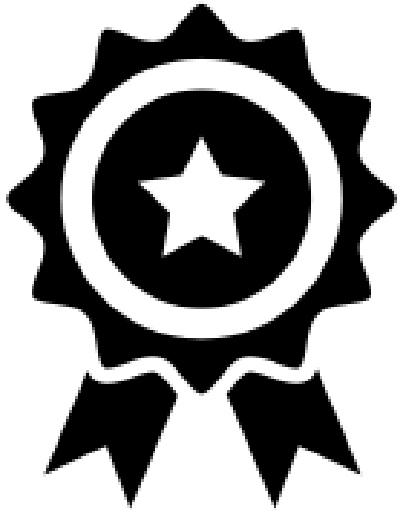

3) Agree on robust standardization bodies

Accomplishments: selection for non-technical standards (are we talking about the same object)

Nautical data

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

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

3) Agree on robust standardization bodies

Accomplishments: selection for technical standards (API specifications, technical/business performance specs)

Nautical data

IHO

International Hydrographic Organization

- From the start assigned to set standards for nautical charts and publications

Operational data

ISO

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

Administrative data

ISO

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

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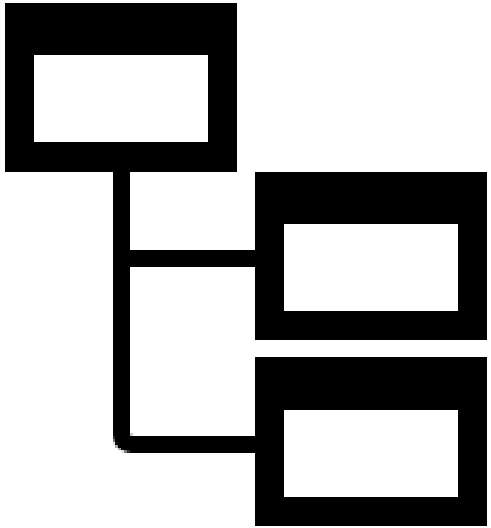

4) Agree on non-technical standards (are we talking about the same object)

Accomplishments

Nautical data

- Berth, berth position, berth types
- Berth pocket
- Maintained depths
- Static/Dynamic under keel clearance
- Static/Dynamic draught
- Breasting/mooring dolphins

Operational data

- Arrival/Departure times: defined in IMO Compendium
- Starting/completion times: defined in IMO Compendium

Administrative data

- Not in scope for ITPCO

Harmonization between IMO and IHO on data elements that have both geospatial and operational interest
IHO and IALA already harmonize

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5) Agree on technical standards (API specifications, technical/business performance specs)

Accomplishments

Nautical data

- Port depths and water levels: exchange with S-44 standards implemented
- Port infrastructure: exchange with S-57 tested, development of S-131 started
- Port information: development of S-131 started

Operational data

- Arrival / Departure times: development under ISO TC 8 started
- Starting / Completion times: development under ISO TC 8 started

Administrative data

- IMO FAL Forms: development under ISO TC 8 started

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6) Develop incentives for data owners

Accomplishments

Nautical data

- Submission of MS4 Port Support Services for nautical and operational data to IMO FAL 47

Operational data

- Submission of MS4 Port Support Services for nautical and operational data to IMO FAL 47

Administrative data

- NA

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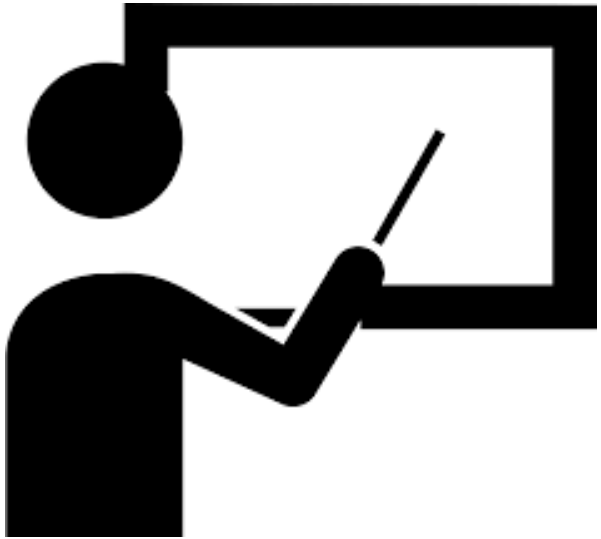

7) Develop guidance for data owners

Accomplishments

Nautical data

- Guide for Nautical Data completed after IHO NIPWG December 2024 meeting

Operational data

- Guide for Operational Data completed after IMO FAL 47 meeting

Administrative data

- Proposal to simplify current Manual and align with Guides for Nautical and Operational data

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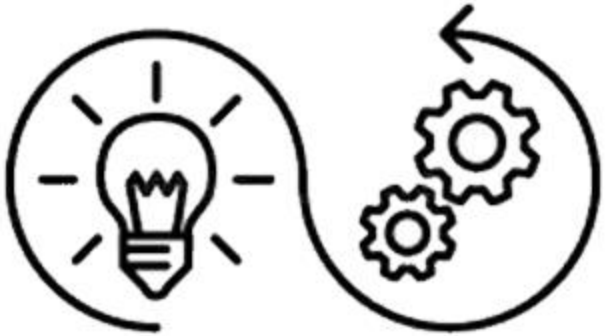

8) Implementation

Accomplishments

Nautical data

- Port depths and water levels in Rotterdam
- Terminal, Berth, Berth position in Rotterdam

Operational data

- Implementation in Tanger Med
- Implementation in Rotterdam with container terminals
- Implementation in Gothenburg with tank terminals

Administrative data

- Not in scope

Thank you for your attention