

# 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?

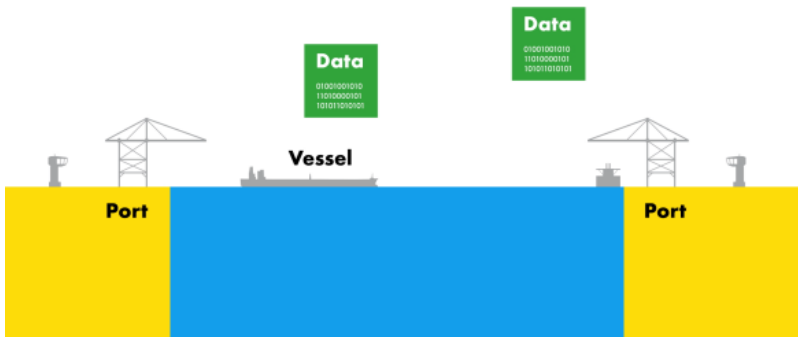
- To improve safety, security and environmental performance to address financial concerns, and encourage innovation and efficiency (IMO)
- Most cost-efficient way to do it, to ensure global outreach



# 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



# Why is a global approach important?

Many different parties per vessel per port call:

- Shipping operates in a global network of up to 8.000 (1) different ports
- Each port has many different suppliers of cargo and ship services
- Ports can receive up to 98.000 (2) different ships
- Each ship can have many different cargo owners, especially containers ships with 24.000 TEU
- Data owners like to share data one to many globally, to minimize administrative burden, errors, delays in updates



# 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

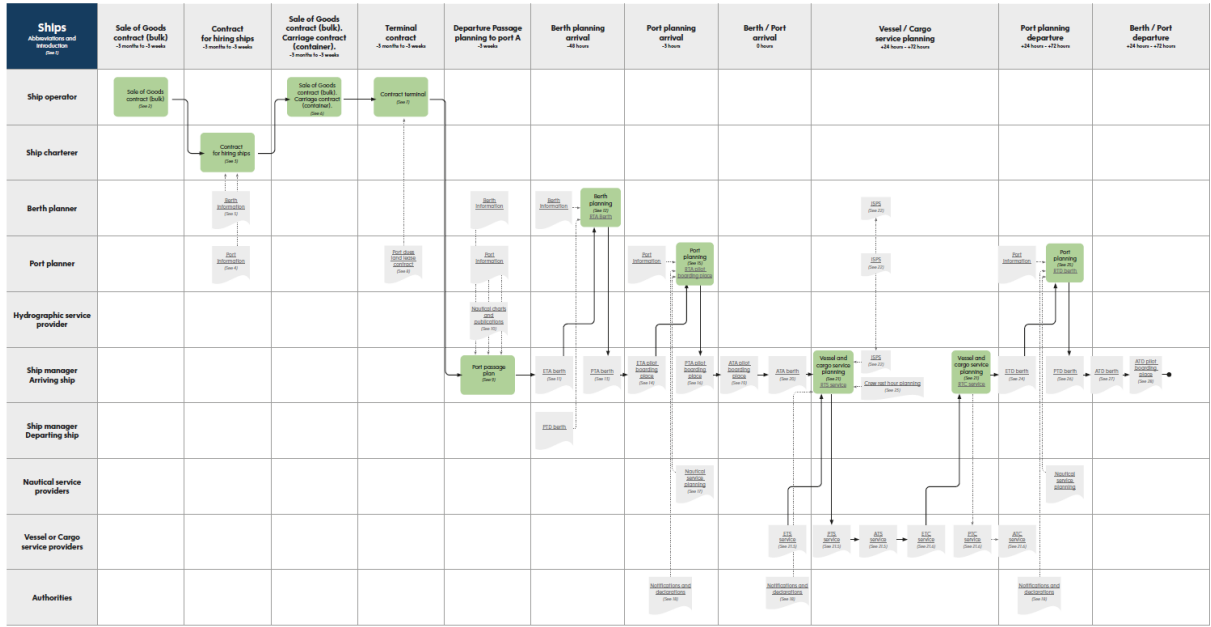
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# 1) Agree on business process of port calls

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

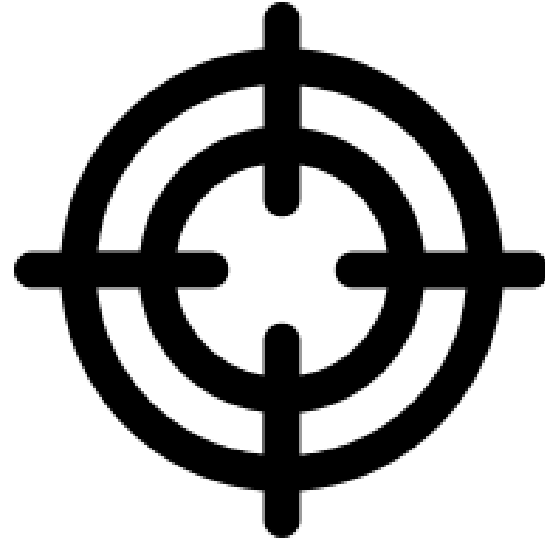


Appendix to Port Call Process  
Last update July 18 2022



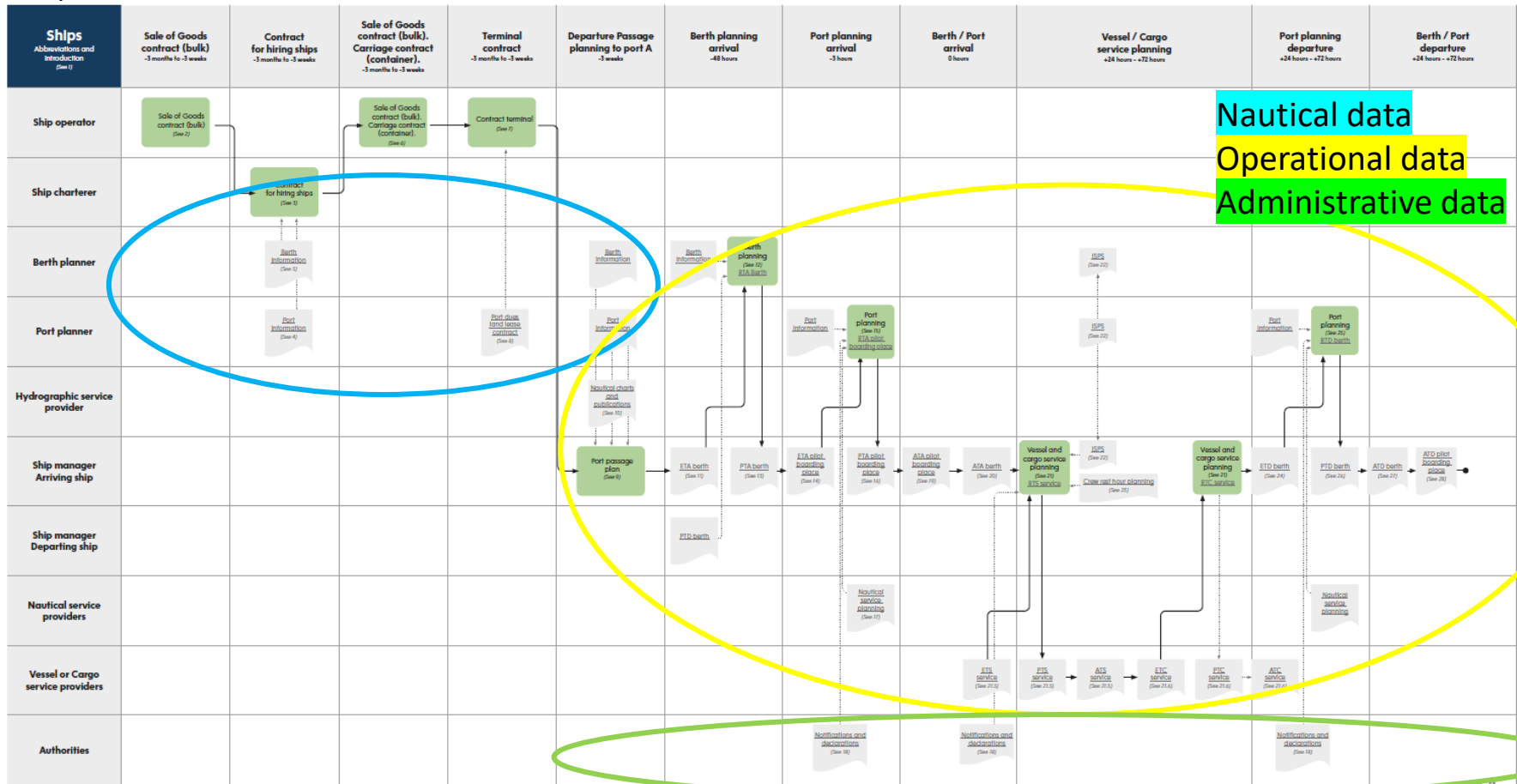
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# 2) Agree on minimum scope of data

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



Nautical data  
Operational data  
Administrative data

## 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
- Business to Business data

### Operational data

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

### Administrative data

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

## 2) Agree on minimum scope of data

Accomplishments: identified data elements within data sets

### Nautical data

- a) Port depths and water levels
- b) Port infrastructure
- c) Port information

### Operational data

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

### Administrative data

- a) IMO FAL forms data
- b) IMO Port facility number

## 2) Agree on minimum scope of data

Accomplishments: rationale based on use cases with most impact on IMO objectives (according SME's of ITPCO & IMO GIA)

### Nautical data

- a) Port depths and water levels: berth to berth navigation is difficult if local depths and water levels are different from Nautical Charts and Publications
- b) Port infrastructure: berth to berth navigation is difficult if local ID is different from Nautical Charts Publications
- c) Port information: berth to berth navigation is difficult if Local Port Information Books are different from Nautical Publications

### Operational data

- a) Arrival / Departure times: 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) Starting / Completion times: just In Time Arrivals or planning of rest hours is difficult if the start and completion times of services are not available

### Administrative data

- a) IMO FAL Forms: reporting notifications and declarations is an administrative burden when data cannot be exchanged but must be re-typed in different formats
- b) IMO Port Facility No.: reporting ISPS is difficult if the data of the Port Facility in the Nautical Chart is different from IMO GISIS data base

## 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

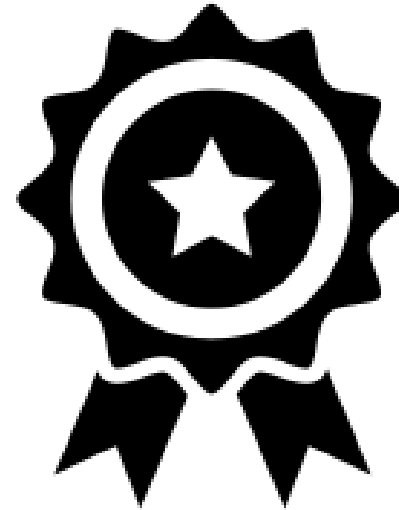
- a) Arrival / Departure times: to be compliant with IMO MEPC.304(72) and MLC
- b) Starting / Completion times: to be compliant with IMO MEPC. 304(72) and MLC

### Administrative data

- a) IMO FAL Forms: to be compliant with IMO FAL Convention to exchange FAL data electronically
- b) IMO Port Facility No.: to be compliant with IMO SOLAS Regulation XI-2/13.4

# Road map Port Call Optimization

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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



- 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

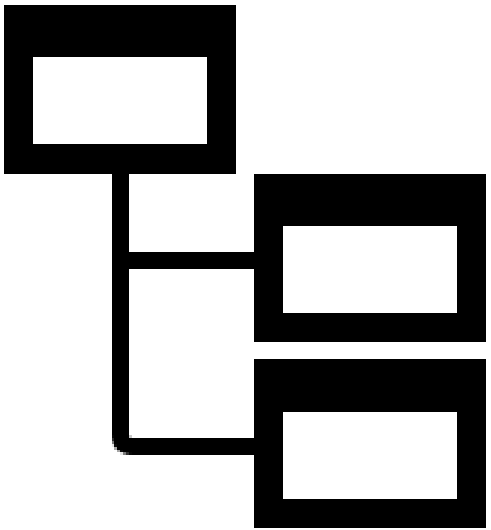
#### Administrative data



- 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

- a) Port depths and water levels: maintained depths defined in IHO S-131
- b) Port infrastructure: berth, berth position, berth pocket and child codes defined in IHO S-101/131 and IMO EGDH
- c) Port information: content aligned with IMO Resolution A.862(20), units of measurements and Chart Datums aligned with IHO Dictionary and Registry

#### Operational data

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

#### Administrative data

- a) IMO FAL forms: not in scope for ITPCO
- b) IMO Port Facility No.: part of terminal data as per IHO

Harmonization between IMO and IHO on data elements that have both geospatial and operational interest  
Looking into option to use same agreement as between IMO, UNECE and Customs  
IHO and IALA already harmonize

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

### Accomplishments

#### Nautical data

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

#### Operational data

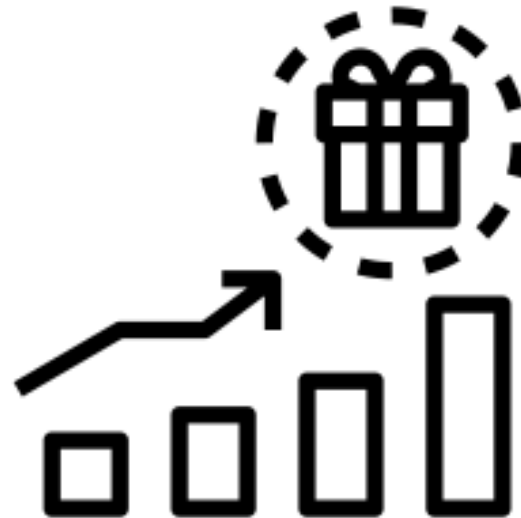
- a) Arrival / Departure times: development under ISO TC 8 started
- b) Starting / Completion times: development under ISO TC 8 started

#### Administrative data

- a) IMO FAL Forms: development under ISO TC 8 started
- b) IMO Port Facility No: part of S-131

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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

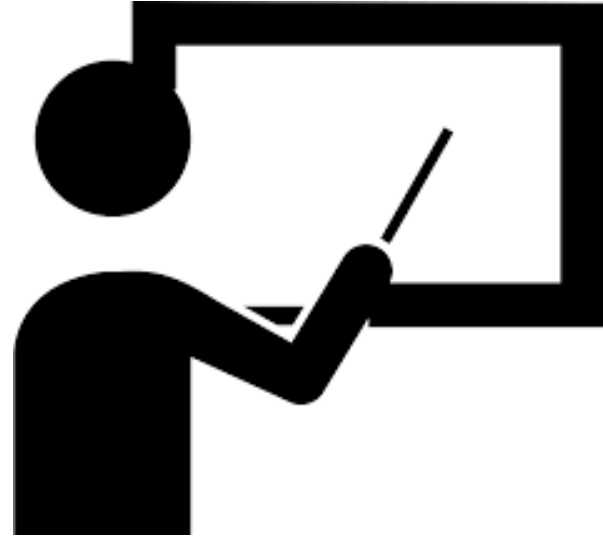
#### Administrative data

- NA



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## 7) Develop guidance for data owners

### Accomplishments

#### Nautical data

- Port Information Manual 3.02
- Guide for Nautical Data  
Completed IHO NIPWG

#### Operational data

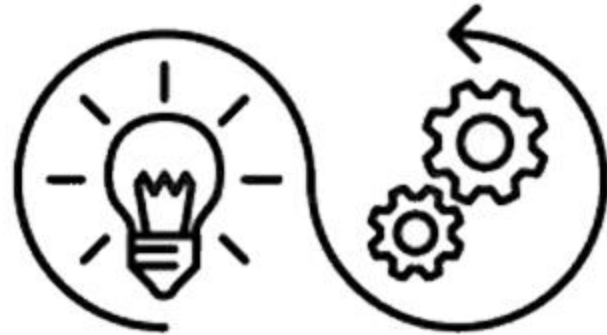
- Port Information Manual 3.02
- Guide for Operational Data  
Completed IMO FAL 47

#### Administrative data

- Proposal to simplify current  
Manual

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## 8) Implementation

### Accomplishments

#### Nautical data

- Port depths and water levels in Rotterdam
- Port infrastructure in all port areas in Rotterdam

#### Operational data

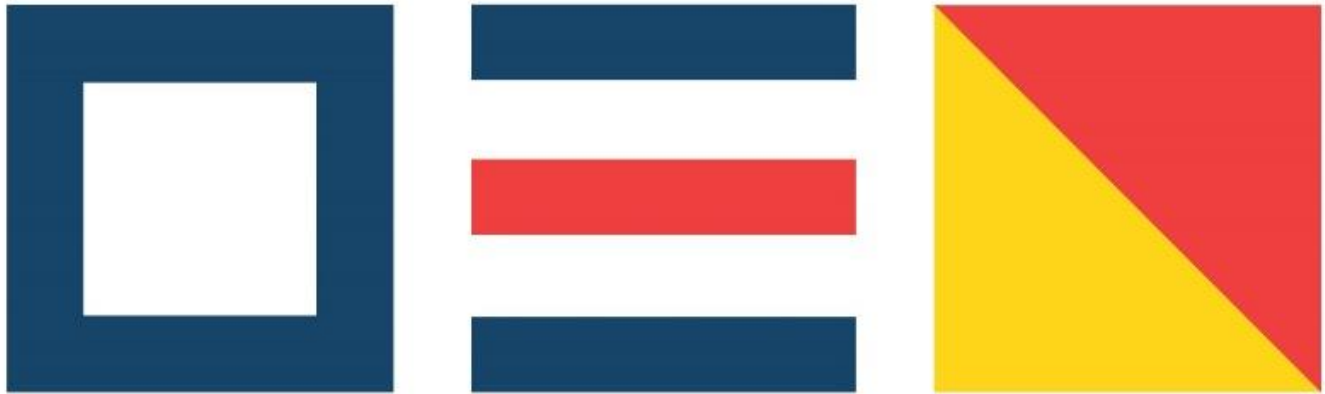
- JIT Arrivals in Tanger Med

#### Administrative data

- Not in scope for ITPCO

Thank you for your attention

# International Taskforce



# Port Call Optimization