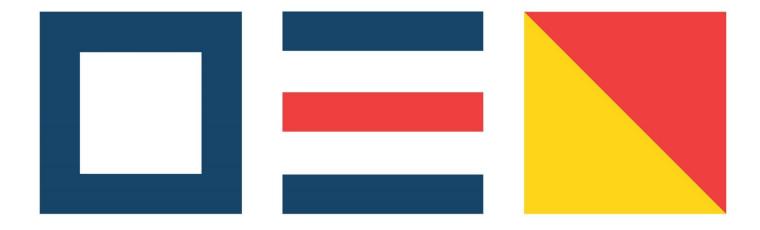
International Taskforce



Port Call Optimization

Content

- Port Call Optimization request
- Present situation
- What is required for Port Call Optimization
- Agenda
- FAQ
- Good news



Port Call Optimization request

Request for data quality and availability of operational port data for optimizing:

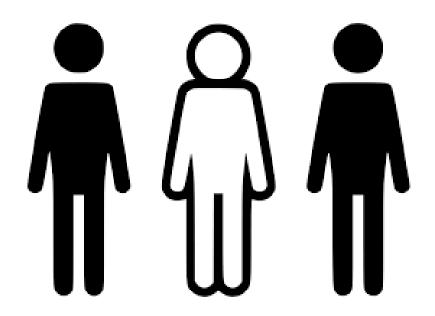
- Sustainable supply chain
- Safe and sustainable berth to berth navigation
- Deadweight
- Port stay
- Berth utilization
- Resources port services

So far only administrative data has been structured for declarations to authorities through IMO FAL



Ports and shipping use their own standards:

- Shipping operates in a network of up to 9,000 different ports
- Ports can receive up to 55,000 different ships
- Ports and shipping traditionally use their own standards
- Parties have many different views on data, therefore lacking process management improvements



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Data owner:

- Is not always aware of consequences of not sharing data
- Is often different per region, country, per state and even per port

Data is collected through other sources:

- Agents / Surveyors
- AIS data, sensor data, or big data

If data is not from data owner:

- Data becomes corrupt
- Data is not binding



Less efficient communication:

- Less efficient means of communication, often one to one
- Today there is no global, neutral, not for profit platform to share data
- Current situation at best is fragmented



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No data quality assurance:

- Only looking at the data, there is no difference between ports with a good or bad reputation
- No data quality improvements through use and feedback of data users



Summary:

- Not possible to cross check data
- Not possible to share data structurally
- No alerts if data has changed
- No data quality indications
- No binding data or data owner ship
- Many parties working for the same ship use different data and standards

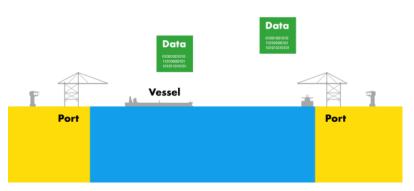


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Data quality is key for Port Call Optimization

Decision as good as the data

 Realizing safe and sustainable berth to berth navigation: where is my berth, when is my berth available?



 Realizing sustainable end to end supply chain: where are my goods, when are my goods available?



Data quality collaboration industry

The Taskforce:

- Consists out of matter experts from maritime industry and standardization bodies
- As a neutral body consults but does not promote solution providers



Data quality collaboration IMO, IHO, IMO GIA

The Taskforce:

- Submits papers to IMO in collaboration with IMO NGO's and Member States
- Submits papers to IHO in collaboration with IMO NGO's
- Provides input to IMO GIA







Agenda

Update 15/01/20:

- 1) Agree on business process of port calls
- 2) Agree on minimum scope of data
- 3) Agree on minimum requirements for standards
- 4) Agree on data definitions of master data
- 5) Agree on data definitions of event data
- 6) Agree on data model of master data
- 7) Agree on data model of event data
- 8) Develop incentives for data owners
- 9) Develop guidance for data owners



1) Agree on business process of port calls

Starting points:

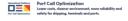
- Every port is dealing with the same IMO regulations and BIMCO contracts, business process based on that
- Important to identify data scope and owner
- Important to have a common understanding how people work together, so called "choreography"

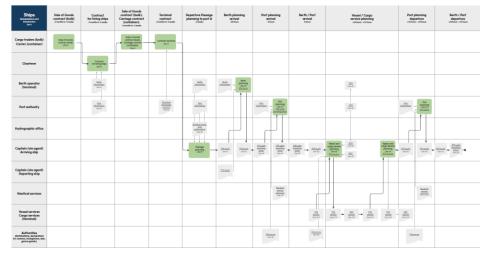
Status today:

Updated with input IMO GIA discussions Q1/20

In progress:

None





2) Agree on minimum scope of data

To be in compliance with:

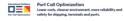
- IMO: SOLAS, ISPS, MLC (data)
- BIMCO: safe port clause (data)
- IMO: FAL (data)

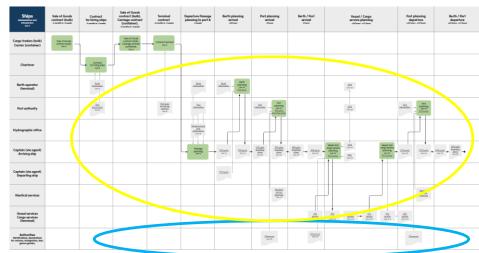
Status today:

Business process appendix updated Q1/20

In progress:

 What is the scope of port call data allowing ships to be in compliance with IMO, and what do ports need to realize it; submit paper IMO MSC 103 Q4/20





3) Agree on minimum requirements for standards

Starting points:

- Robust, open, mature, maintained standards for sustainable investments and quick adoption; maintained by robust not for profit organizations
- There will never be one global solution or data base, as a minimum the industry should have interoperability
- Data definitions: are we talking about the same objects and their attributes? Good for human to human exchange. Critical for system to system exchange

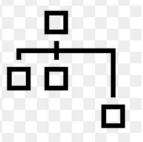
Data model: what is the relation between objects?
Critical for system to system exchange

Status today:

Fixed starting points







4) Agree on data definitions of master data

Status today:

- Port Information Manual (PIM) 1.4.5 published Q4/19
- NP100 edition 12 published

In progress:

- Processing feedback PIM 1.4.5 of IHO NIPWG 7 Q4/20
- Evaluate IMO vessel and GS1 location numbers Q4/20
- Definitions for UKC, air draught, quay height Q4/20



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5) Agree on data definitions of event data

Status today:

- Port Information Manual (PIM) 1.4.5 published Q4/19
- NP100 edition 12 published
- Submission IMO FAL 43 Q3/19 (ship movements)
- Submission IMO FAL 44 Q3/20 (ship services, ops data)
- Update EPCIS Q2/17 and Q2/19 (goods movements)

In progress:

To be discussed in IMO FAL 44 Q4/20



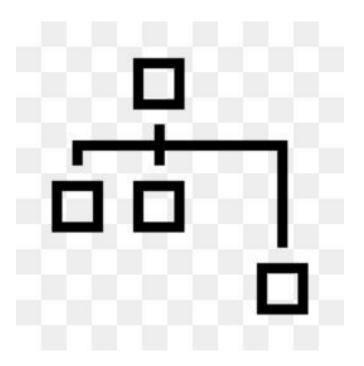
6) Agree on data model of master data

Status today:

No data model yet for update of ENC's and port data bases

In progress:

- Development of POC for exchange of terminal, berth, berth position and maintained depths, discuss quotation Q2/20
- Presentation by IHMA to IHO HSSSC 12 Q4/20



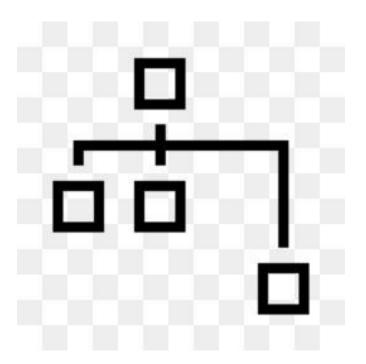
7) Agree on data model of event data

Status today:

- S211 can't be used, other standards active
- EPCIS, goods movements, can be used for actual events only

In progress:

- Road map to one robust standard Q2/20
- EPCIS to capture future events QX/XX



8) Develop incentives for data owners

Starting points:

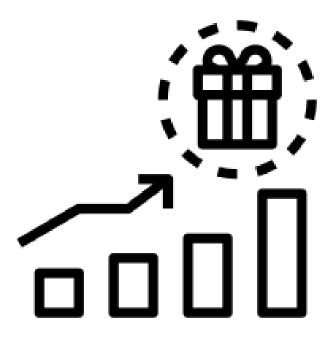
- Incentives are needed for all stakeholders to invest in data quality and availability
- Incentives can be implemented more quickly than regulation
- Inventive examples: benchmark, ISO / IMO label

Status today

No ideas submitted

In progress

- Benchmark data quality: explore possibilities Q1/20
- ISO / IMO label: paper IMO MSC Q4/20



9) Develop guidance for data owners

Starting points:

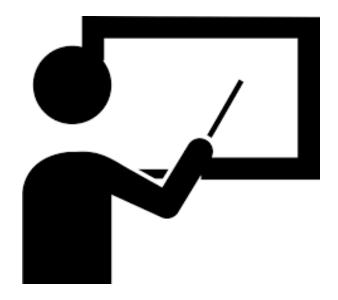
Guidance can be e.g. a manual or tooling

Status today:

- Manuals: Port Information Manual, Just In Time Guide
- Tooling: Global Port Master Data platform

In progress

- PIM: step by step, frozen standards Q4/20
- JIT Guide: add bulk and tanker sector
- Consider how to organize neutral not for profit platform



Frequently Asked Questions

- Shipping is 5000 years old, why have standards never been used?
- Roughly 80% of goods is transported by sea, why have supply chain standards never been used?



Good news

- There's nothing new
- Addressing existing contracts and resolutions, using existing definitions, locations and data models will already create dramatic improvements



Thank you!

