

International Taskforce



Port Call Optimization

Port Call Optimization

Request for data quality

For optimizing:

- Deadweight
- Speed / Emissions / Bunker savings
- Port stay
- Safety
- Berth utilization
- Hinterland connections
- Resources port services

 MAERSK LINE

Specific information required for Safe Port Memos

- | | |
|--|---|
| > Name of port | > Material used for fendering |
| > Name of terminal | > Distance between berth and shipside |
| > Name of berth | |
| Why is this information so difficult to obtain? | |
| > Certified Bollard Capacity | > Max speed in channel/port |
| > Angle at which capacity is measured | > Max draft alongside |
| > Distance between Bollards | > Berthing day/night |
| > Distance from Bollards to edge of berth | > Other: ice, weather, swell, surge, aircraft, currents etc |
| > Height of berth at Chart Datum | |

Present situation

Ports and shipping use their own standards

- Use of different standards and identifiers per port
- Shipping operates in a network of up to 1200 ports
- Ports can receive up to 55.000 different ships



Present situation

Data not from data owner

Data owner:

- Is not aware of / does not want ownership
- Is not aware of consequences not sharing data

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



Present situation

Less efficient communication

Less efficient means of
communication, often one to one



Present situation

No data quality assurance

Only looking at the data, there is no difference between ports with a good or bad reputation



Present situation

Summary

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



Data quality is key for Port Call Optimization

Decision as good as the data

- There will never be one global solution or data base
- As a minimum we should have one global sustainable standard for interoperability between all types of shipping, terminals, ports and hinterland
- Based on global, existing, open industry standards for quick endorsement by industry
- *Align with STM, SMAR T, SESAME; if different signals, industry doesn't move*



Agenda – update 12/06/18

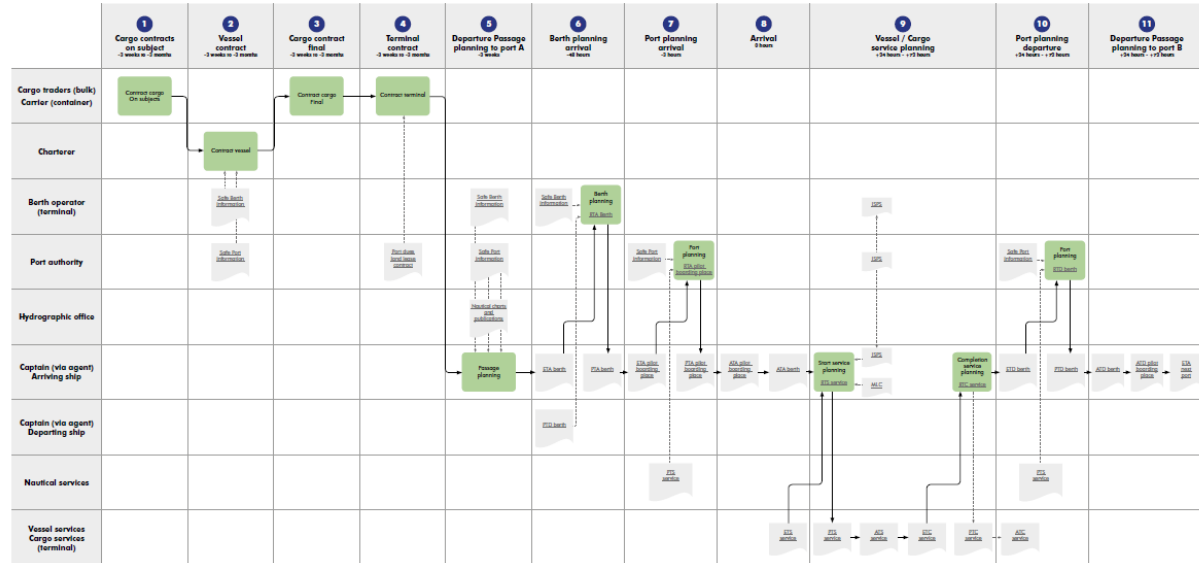
- 1) Agree on business process of port calls
- 2) Agree on minimum scope of data
- 3) Agree on functional definitions
- 4) Use of functional definitions by industry
- 5) Agree on data model and formats
- 6) Use of data model and formats by industry
- 7) Agree on quality ISO label
- 8) Use of ISO quality label by industry
- 9) Local roll out by industry
- 10) Global roll out by industry



1) Agree on business process of port calls

Done Q2/14

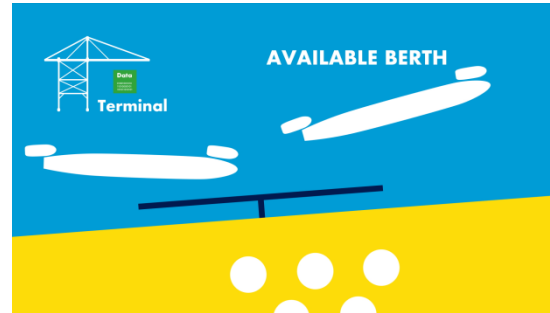
- Every port is dealing with the same Bimco contracts, IMO resolutions - business process based on that
- Important is to identify scope of data and data ownership
- Important to have a common understanding of the port call process
- *Identify real time , business/public data, push/pull data, data governance Q3/18*



2) Agree on minimum scope of data

Done Q3/15

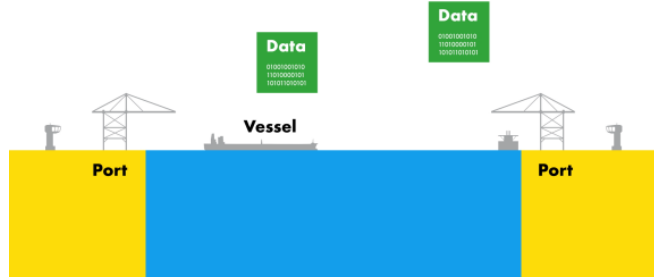
- Based on business process, to be compliant no. 1 priority
- Other things are nice to have



3) Agree on functional definitions

Done Q3/17

- Functional definitions are a must, no room for misinterpretation
- Based on existing industry standards
- *Publication NP100 December 2019*



4) Use of functional definitions by industry

Done Q3/17

- Who's on board?
- *Invite more industry partners next meeting Industry Input Workshop November 29 2018*

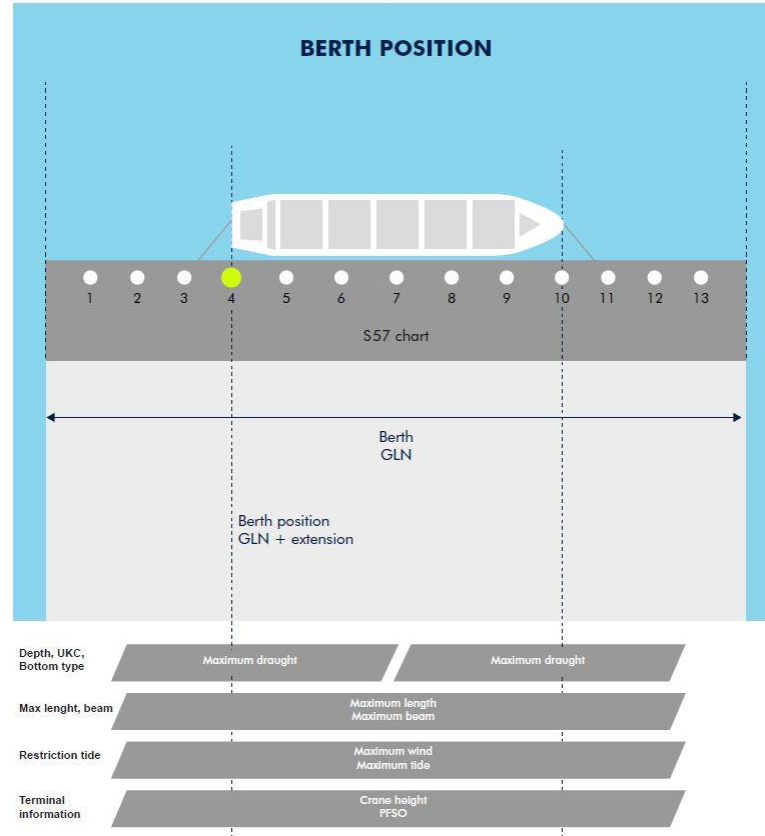
| Shipping and agents | Ports | Standards partners | Endorsers |
|---------------------|-----------------|--------------------|--------------------------|
| CMA-CGM | Algeciras | UKHO | BIMCO |
| Inchcape | Busan | GS1 | IALA |
| Maersk | Göteborg | | IHMA |
| MSC | Houston | | IHO |
| Shell | Ningbo-Zhoushan | | Lloyds List Intelligence |
| Vopak | Rotterdam | | Marine Traffic |
| | Singapore | | STM |
| | Tanger Med | | UK P&I |
| | | | Xvela |
| | | | IAPH |
| | | | Nautical Institute |
| | | | Green Award |
| | | | Intercargo |

5) Agree on data model and formats

Q2/19

- For real time data compatibility is key, interfaces possible
- Industry needs sustainable standards
- Maintenance of data definitions is critical
- *Organize 2nd technical committee Q4/18*

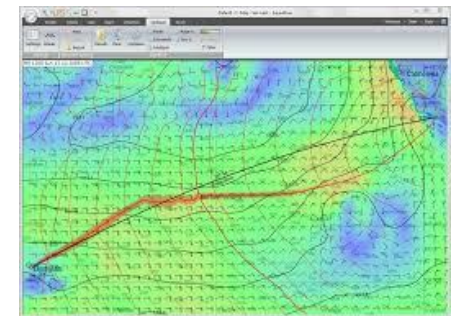
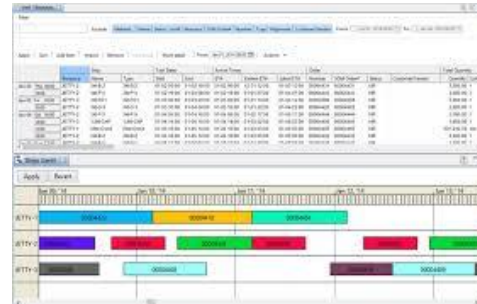
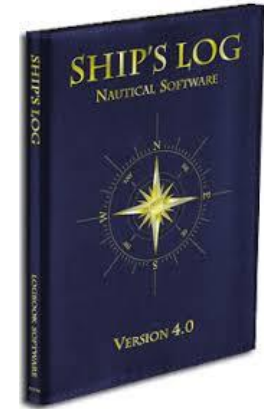
3. BERTH POSITION MAXIMUM SIZES AND CONDITIONS



6) Use of data model and formats by industry

Q2/19

- ECDIS, Berth/Port planning , VTS
- Related: weather routing, AIS



7) Agree on ISO quality label

Q3/18

- Functional definitions, data definitions and applications are not sufficient for data quality, security, compatibility
- Regulation takes too much time to implement or to regulate, market driven is a better option
- Customers can ask for ISO label for compliancy with BIMCO/IMO/JIT
- Developed by more than one class society for confidence of market
- Possible supported by IMO Blu code look alike
- *Fine-tuning key parameters, incl. primary risks, minimum requirements*
- *Cross matching relevant parameters of existing ISO standards: if one of the standards changes, the whole scheme is updated automatically*
- *Development standard @ certification scheme*
- *Determine pilot assessments*
- *Review, feedback and adjustments*



8) Use of ISO quality label by industry

XX/XX

- *Proof of value to industry*



9) Local roll out by industry

2018

- Proof of value for port: safety, sustainability, economic
- Implementation of general information standards by ports

| <u>Basic data</u> Berth and Berthing position ID Pilot Boarding Place – Berth sections ID | |
|---|---------------------|
| <u>Static data</u> | <u>Dynamic data</u> |
| Minimum depth | ATA/ATD Berth |
| Maximum sizes | ETA / ETD Berth |
| Maximum conditions | PTA / PTD Berth |

10) Global roll out by industry

XX/XX

- Industry standards endorsed by IMO/IHO
- Industry push for ISO label
- *IMO/IHO HGDM meeting Q3 2018*
- *IMO-GIA-Low Carbon Shipping Q3/18*
- *Alignment of initiatives e.g. STM / SESAME / SMART*
- *IHO / UKHO / IHMA publication data reference model for master data*
- *IMO FAL / BIMCO / IHMA submission / S211 standard for event data*



Frequently Asked Questions

- 1) Shipping is 5000 years old, why have standards never been used?
- 2) 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 and technology, will already create dramatic improvements



