

# Outcome Industry Input Workshop 29/11/18



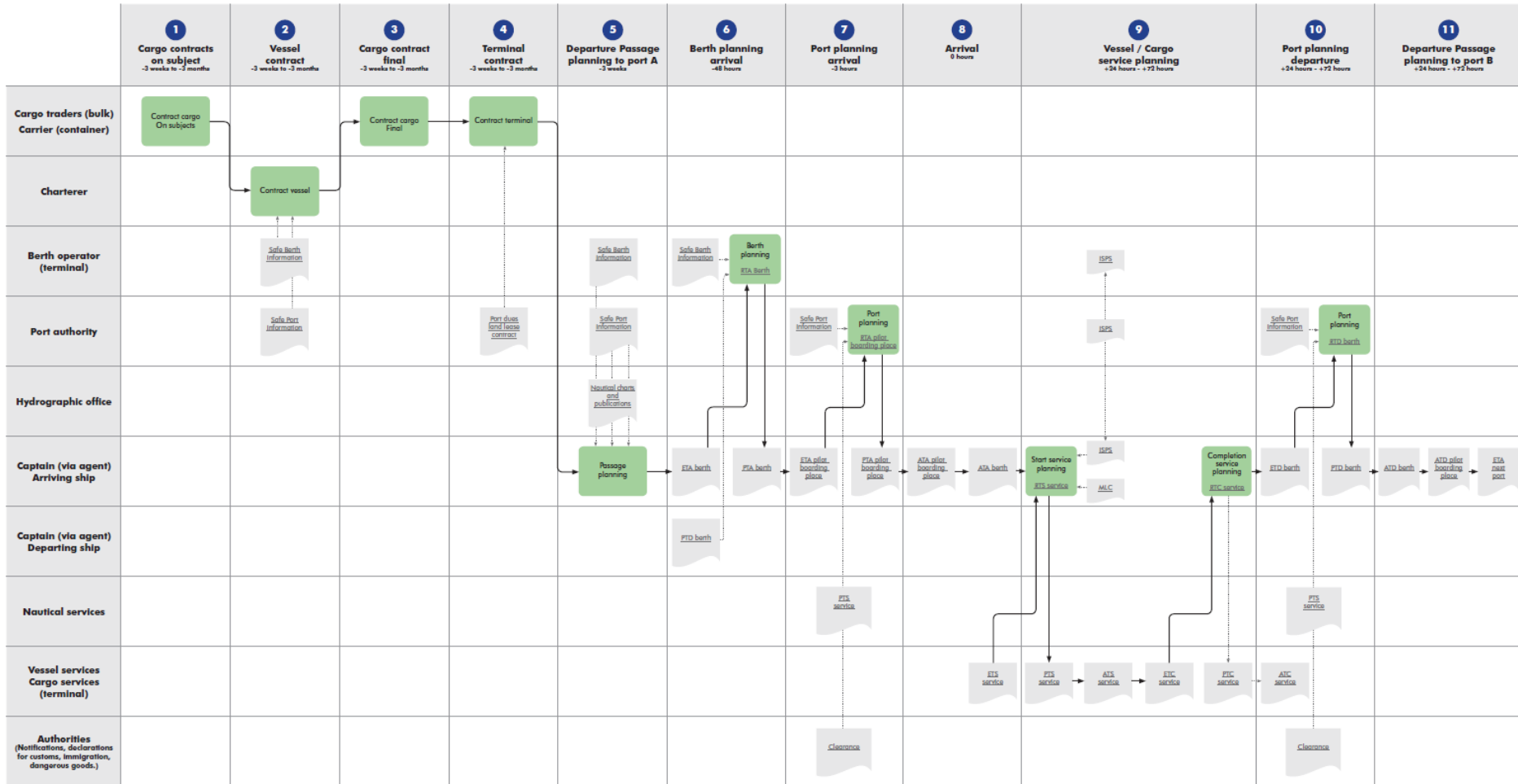
**ADMIRALTY**



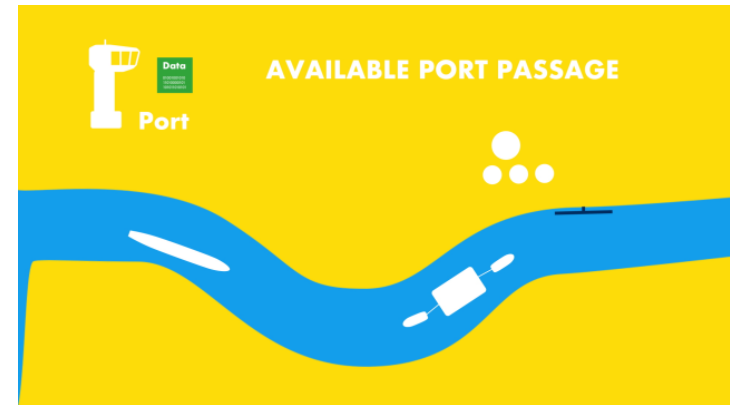
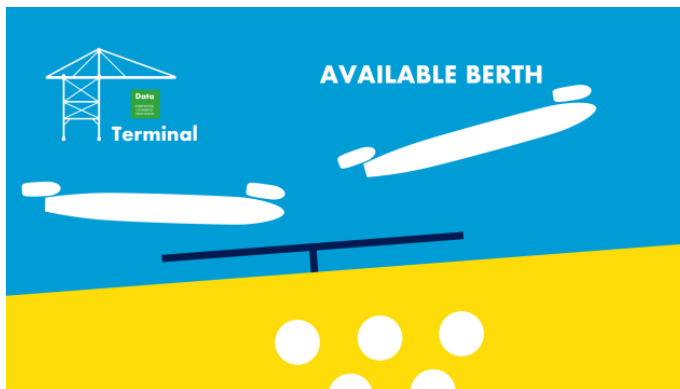
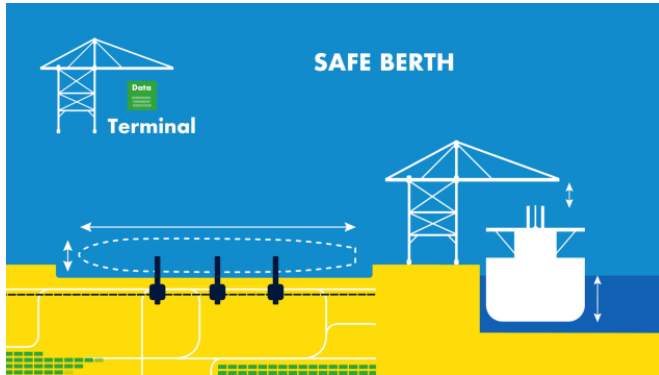
# Business process of a port call



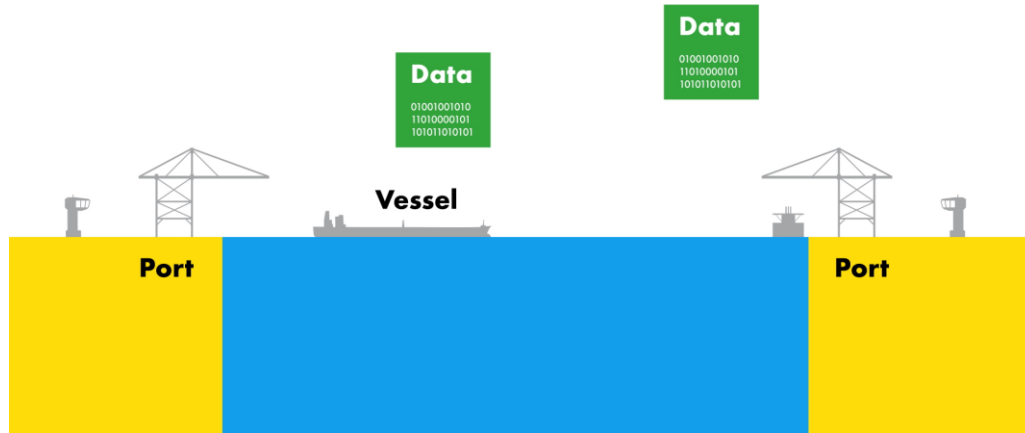
## Port Call Optimization



# Scope of data, based on business process



# Using existing global industry standards



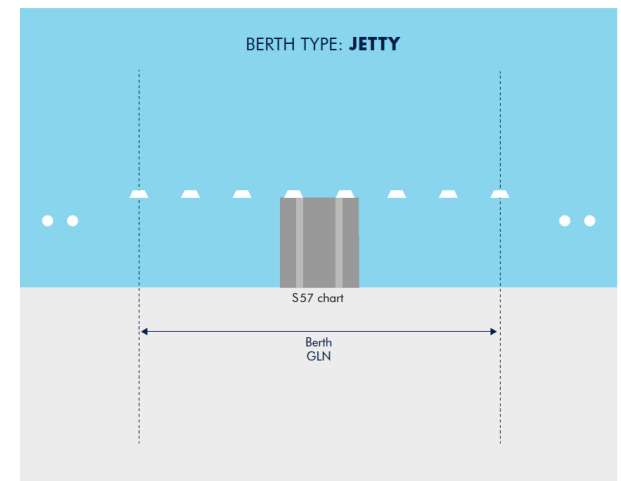
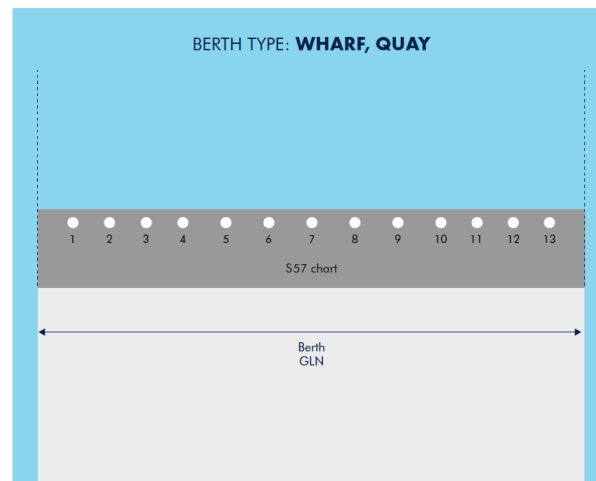
# Master data – berth

## Berth

Can be specified with two points being the two extremities of the berth.  
Every single berth is one straight line

- Quay walls: both corners
- Jetty: first/last breasting dolphin

### 1. BERTH



# Master data – berth position

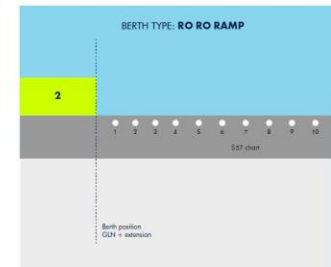
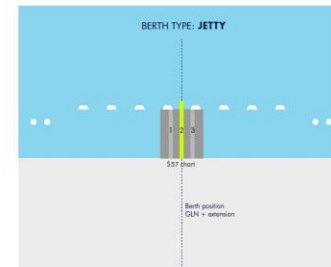
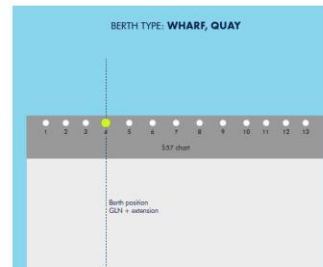
## Berth position

The position along the line of the berth can be specified with one point :

- Quay walls: aft bollard – 0,25 bollard accuracy; optional forward bollard
- Jetties: manifold number
- Roro: ramp number
- Double banking: same as single

Action: add buoy / anchor berth

2. BERTH POSITION



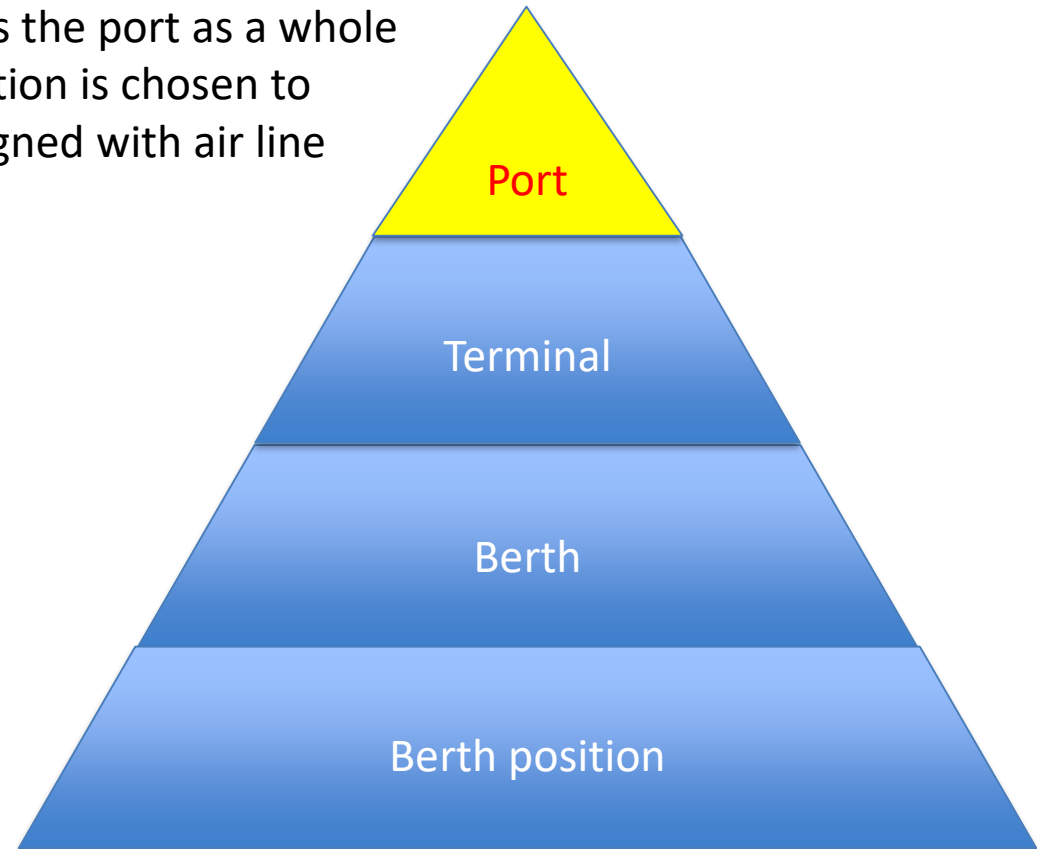
# Master data – direct reference

A single position which represents the port as a whole (generally a center of gravity position is chosen to represent the port's location). Aligned with air line industry

- WGS84
- Latitude : (-) decimal degrees
- Longitude: (-) decimal degrees

Example:

- 51.9200000, 4.5000000



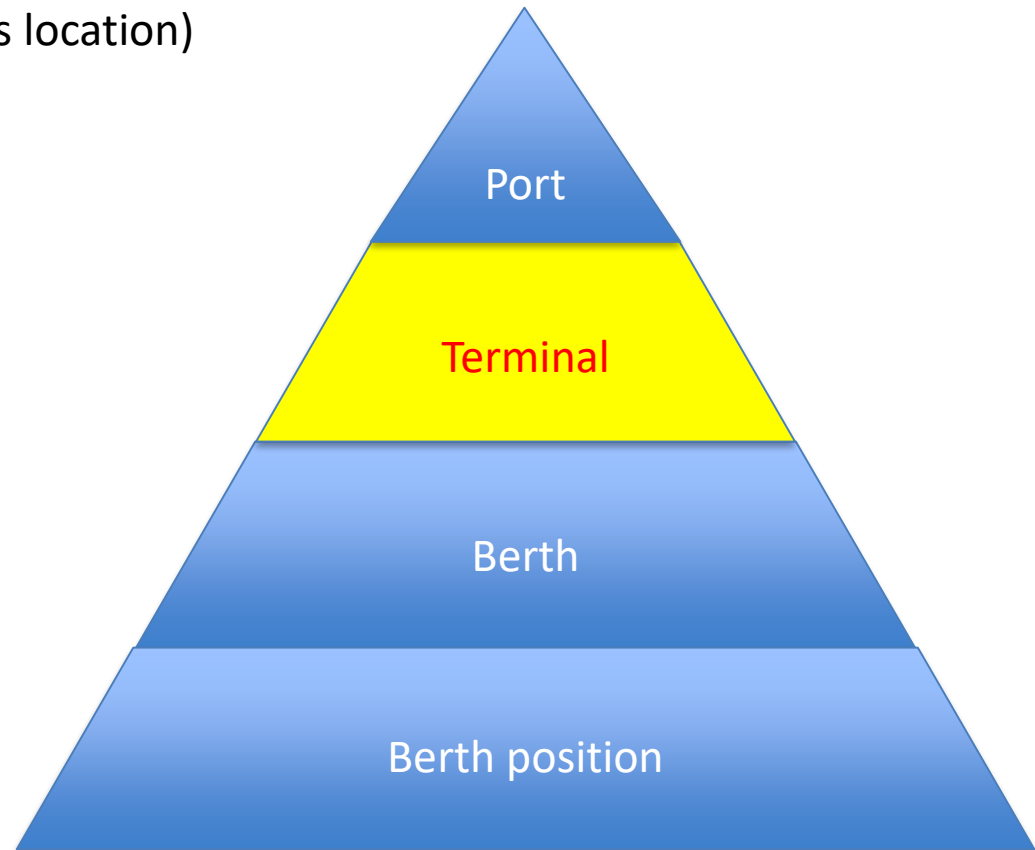
# Master data – direct reference

A single position which represents the terminal as a whole (generally a center of gravity position is chosen to represent the terminal's location)

- WGS84
- Latitude : (-) decimal degrees
- Longitude: (-) decimal degrees

Example:

- 51.890002, 4.282050





# Master data – direct reference

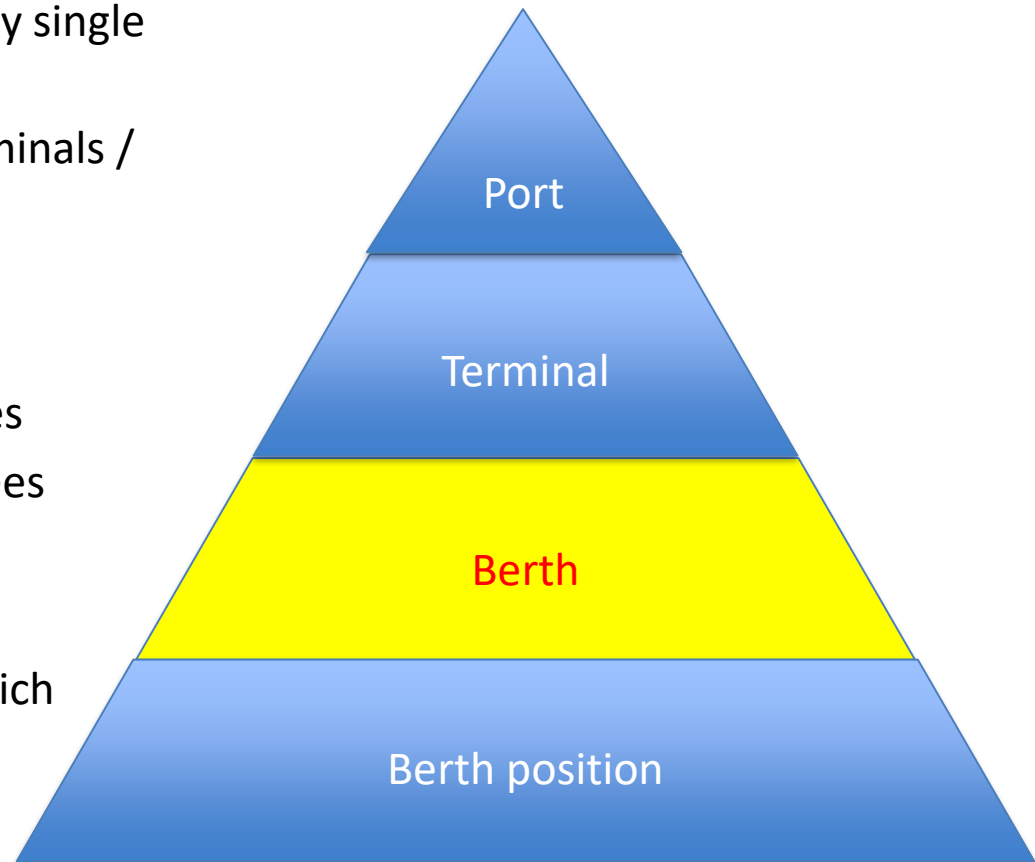
Can be specified with two points being the two extremities of the berth. Every single berth is one straight line

Berth might be used by more terminals / users

- WGS84
- A: Latitude : (-) decimal degrees
- B: Longitude: (-) decimal degrees
- Every point should be named
- Direction not important
- Using letters over numbers which could imply importance

Example:

- A: 51.887190, 4.284030
- B: 51.886240, 4.284560



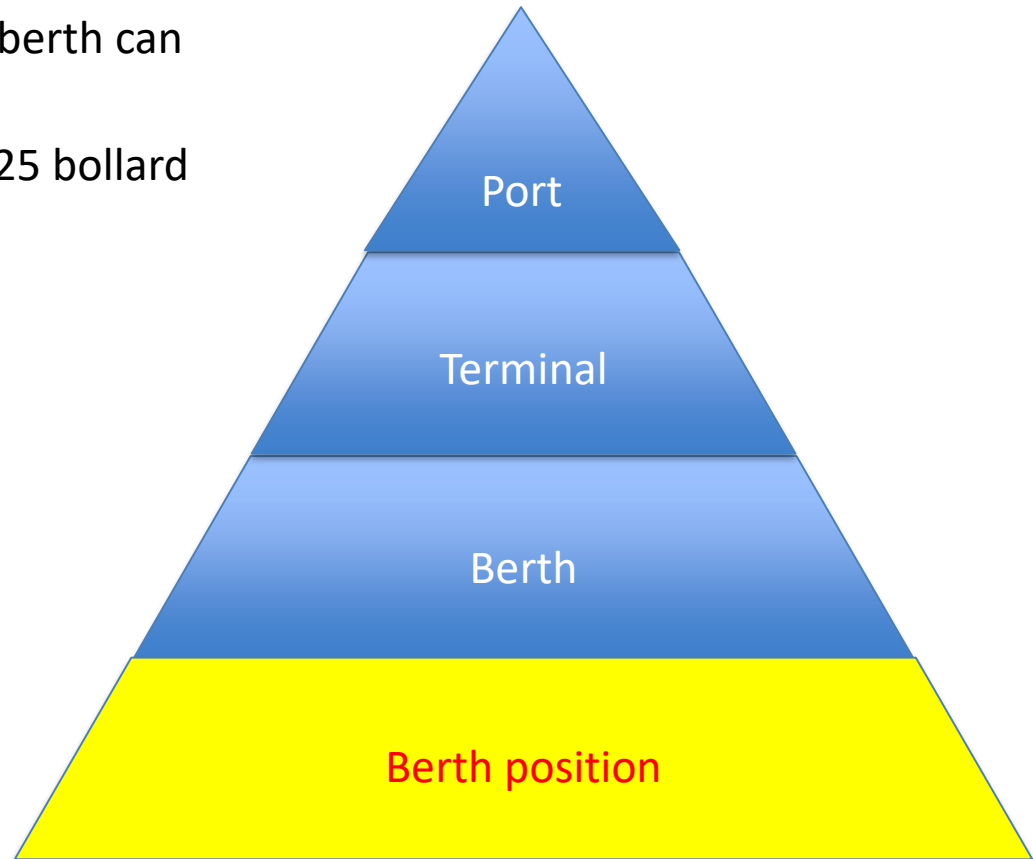
# Master data – direct reference

The position along the line of the berth can be specified with one point:

- Quay walls: bollard number, 0,25 bollard accuracy (3 – 5 meter)
- Jetties: manifold number
- Roro: ramp number
- WGS84
- Latitude : (-) decimal degrees
- Longitude: (-) decimal degrees

Example:

- 51.886810, 4.284150

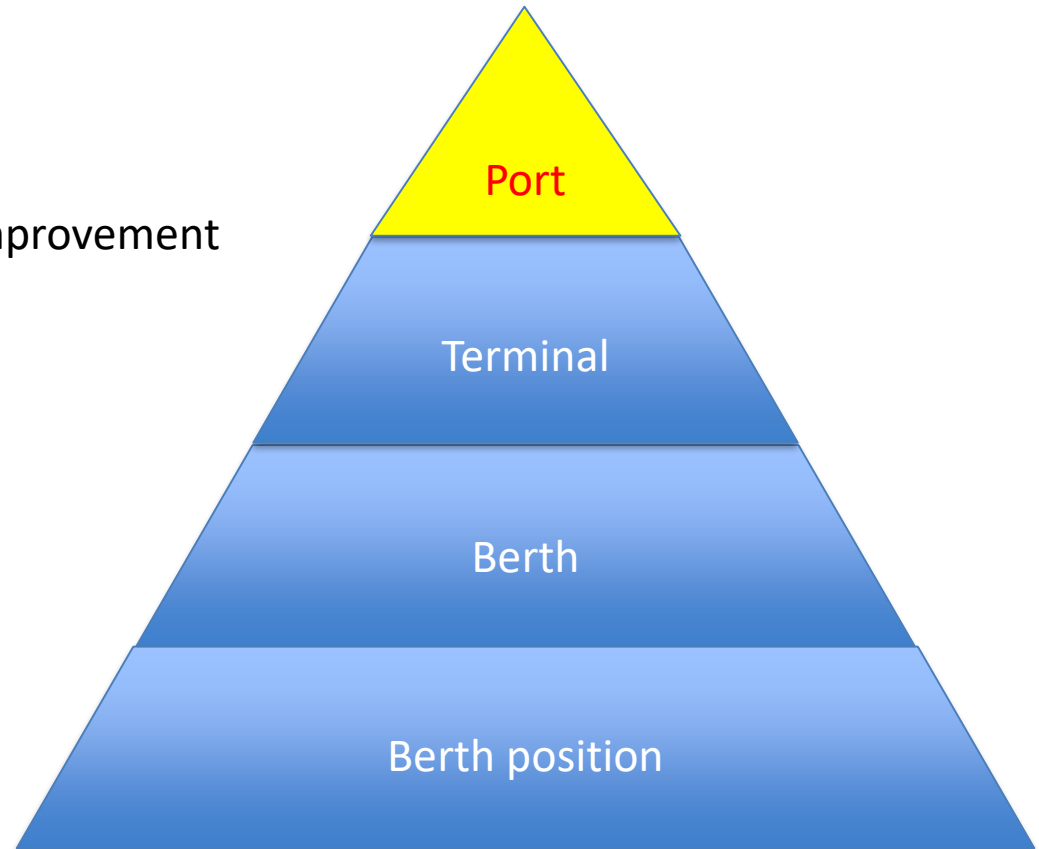


# Master data – indirect reference

UNLOCODE

ISO 3166

Action: workgroup looking into improvement



# Master data – indirect reference

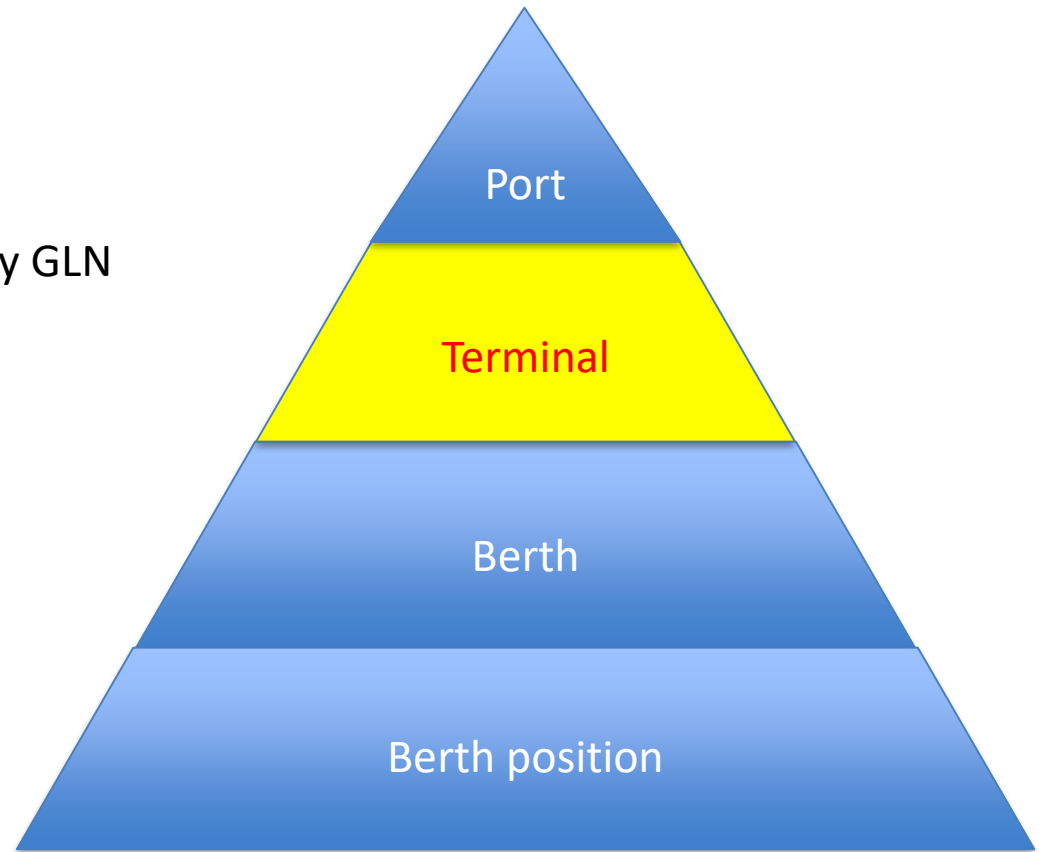
## GLN

ISO/IEC 6523

Attribute: UNLOCODE + SMDG

Attribute: GISIS

Action: EDIFACT to be able to carry GLN



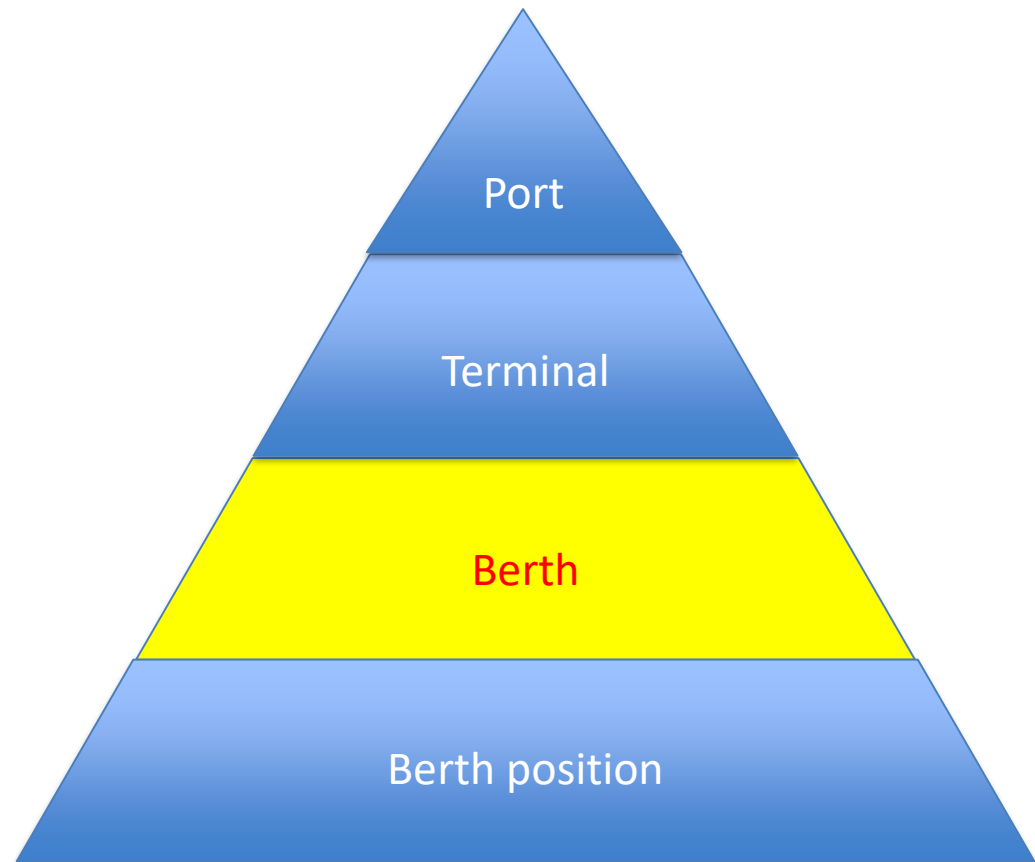
# Master data – indirect reference

GLN

ISO/IEC 6523

Attribute: name or number

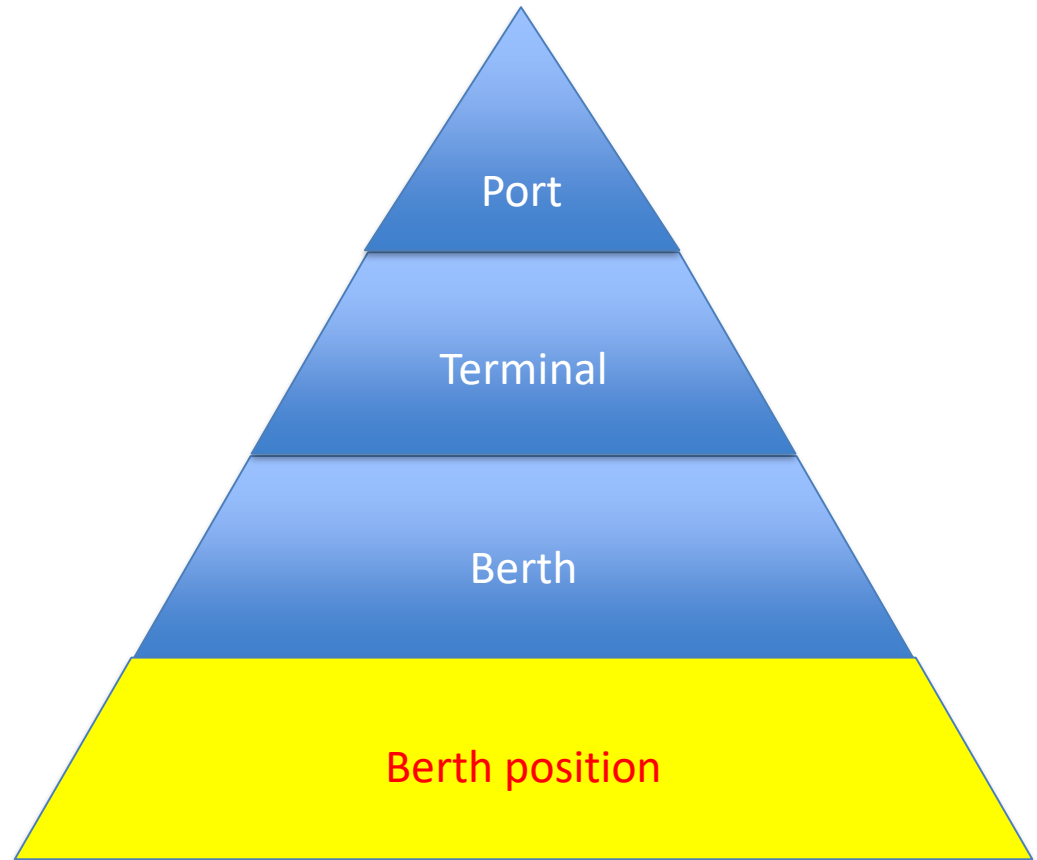
Action: establish domain in IALA



# Master data – indirect reference

GLN with extension

ISO/IEC 6523



# Event data - functional definitions

## Arrival / Departure of ships:

- Estimated Times – when a vessel estimates it will arrive/depart at/from a specified location
- Requested Times – when a vessel is requested to arrive/depart at/from a specified location
- Planned Times – when a vessel plans to arrive/depart at/from a specified location
- Actual Times – when a vessel arrives/departs from a specified location

## Starting / Completion of services:

- Estimated Times – when a service provider estimates a specified service will start / be completed
- Requested Times – when a service provider is requested to start/complete a specified service
- Planned Times – when a service provider plans to start/complete a specified service
- Actual Times – when a service provider starts/completes a specified service

# Event data – data definitions

- Format data: JSON over HTTP
- Format exchange: EPCIS, ISO/IEC 19987:2017
  - What: IMO number (or other unique number; IMO number now also for non Solas vessels)
  - When: ISO 8601
  - Where: ISO 3166, 6523
  - Why: see functional definitions
  - Event ID: UUID of Open Software Foundation
  - Record time: ISO 8601
  - Source: name
  - Upper / Lower confidence level +/- xx:xx (hr:min) (wording is difficult to understand)



# Event data – data definitions example

Definition	EPCIS Event Path	Port Call Message Format
What	<u>/epcList</u>	"ship": {"imo": "9704611"}
When	<u>/eventTime /eventTimeZoneOffset</u>	"eventTime": "2018-05-08T14:00:00Z" "lowerEventTimeConfidence": "PT1H30M", "upperEventTimeConfidence": "PT30M"
Where	<u>/bizLocation</u>	"port": "NLRTM" "terminal": "0123456789123" "berth": "0123456789123" "berthPosition": "0123456789123B6.25" "shipSide": "portside"
Why	<u>/bizStep /action</u>	"eventType": "ATABerth_terminal"
EventID	<u>/eventID</u>	"uuid": "75ecaa9b-cc77-45bc-90fa-26d9cdad5e1a"
Recordtime	<u>/recordTime</u>	"recordTime": "2018-05-09T09:13:47:00Z"
Source	<u>/source</u>	"source": "PCS"

# Event data – S211

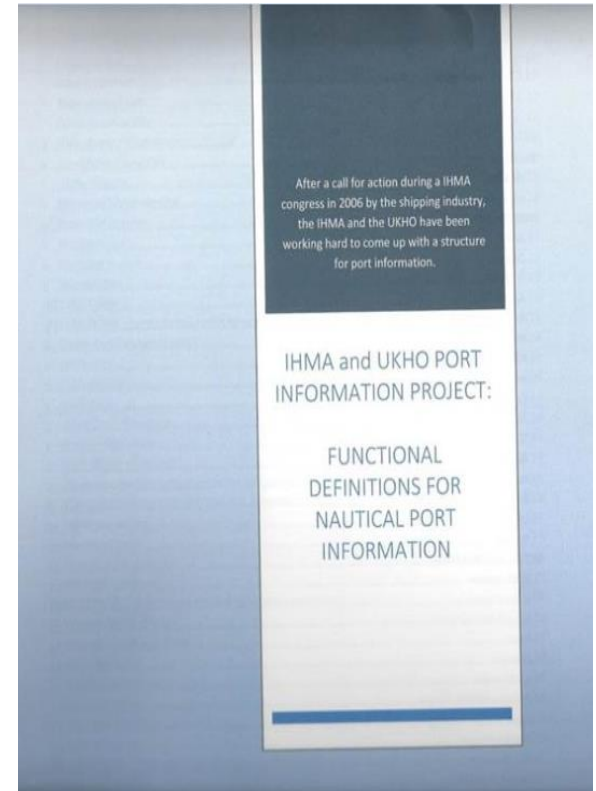
Feed back received as major comments re. current S211 standard:

- Not aligned with functional definitions of IHMA/UKHO - agree on same terminology and semantics based on business process and its appendix/ IHMA/UKHO document
- Not accommodating berth position – was overlooked
- Not possible to share data without port call ID – technically it is possible, however more difficult to realize
- Too rigid, too complex. not possible to include local events for daily operations - there's an interest in being able to extend the format with proprietary data
- Too many fields are defined in the schema as enumeration fields, where coded fields would have been more appropriate – has been point of discussion from start; for taking out of validation into operation worth to review
- There seems to be no problem to align with industry standards

# Publication of functional and data definitions

Aligned with publication functional definition

Action: add data definitions to document



# Maintenance of definitions

Maintenance is as critical as functional and data definitions.  
While parties develop products, new needs will arise.  
Today there are multiple standardization initiatives.

Learning from other industries: robust maintenance from day one by a robust organization saves time and money. ISO is such organization. Right organization to bring multiple standardization initiatives together.

Maintenance of some standards might be delegated to related organizations such as GS1 or UNCEFACT

Action: connect to ISO shipping committee after gap analysis



# GAP analysis ISO – master data

Action: together with UKHO / IHO



# GAP analysis ISO – event data

Action: together with BIMCO / IMO FAL / IMO Vocabulary



# Guidance for implementing standards – master data

IHO expressed the need for guidance for ports to improve updates to ENC's and publications

Action:

1. General information
2. Berth master data (maximum sizes)
3. Port passage master data (maximum sizes)



# Guidance for implementing standards – event data

IMO GIA Low Carbon Shipping expressed the need for guidance for ports, terminals and shipping to reduce emissions by Just In Time arrivals

Scope:

1. Industry round table discussions for input
2. Look into options of using existing guides or codes as a template
3. Look into options of using existing ISO certification schemes for global roll out





# Interoperability and platforms

Presentations of:

- 1) Solution providers: wish to put resources together for a neutral platform
- 2) Traxens: smart container platform
- 3) Ericsson: tracking and tracing of cargo

# Interoperability and platforms

## Outcomes shared with press:

1. Little discussion about the proposed standards as most of them are based on existing ISO or branch standards
2. Importance of ISO standards is that they're well maintained by a robust organization
3. Next step forward is to carry out a GAP analysis which proposed standards are not yet maintained by ISO
4. Guidance is needed for implementation of standards
5. Discussion about standard API's, allowing platforms to connect to one another. Not a concrete outcome yet, but setting the scene of what the ambition of the marine industry should be

