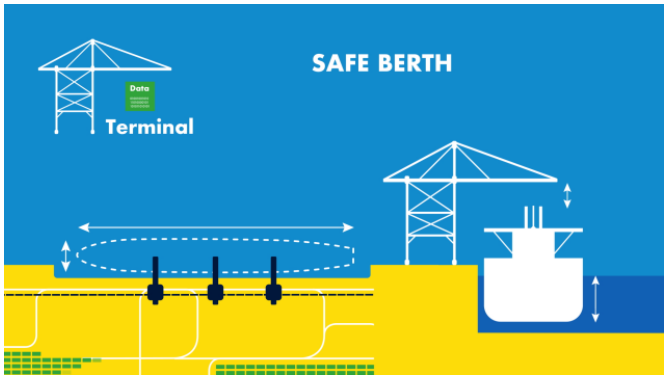
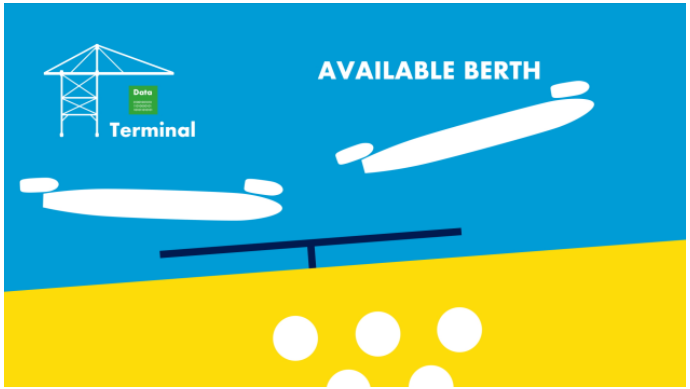
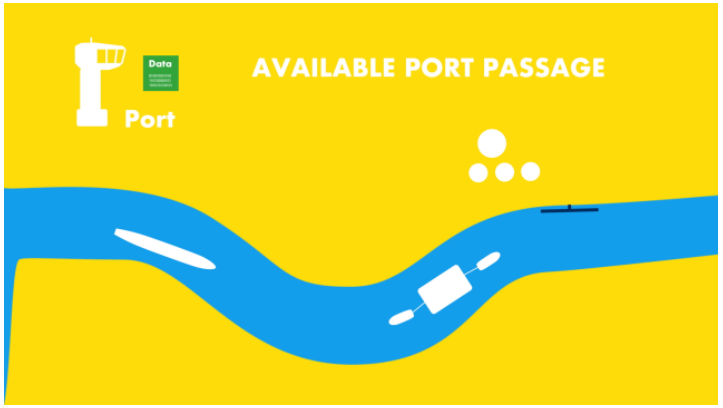
Follow up of Industry Input Workshop 24/05/18

Update 05/07/18

Done – Scope of data



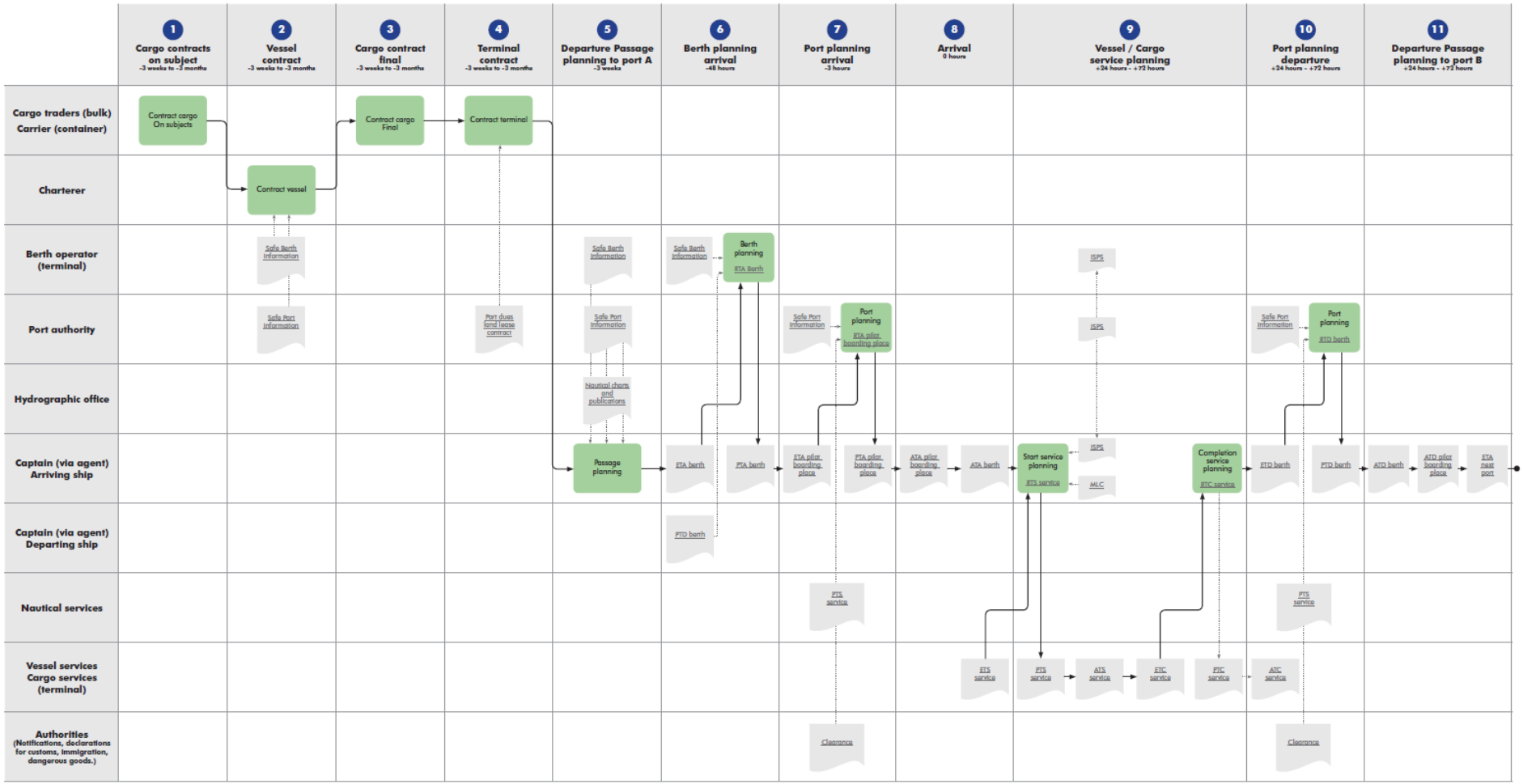




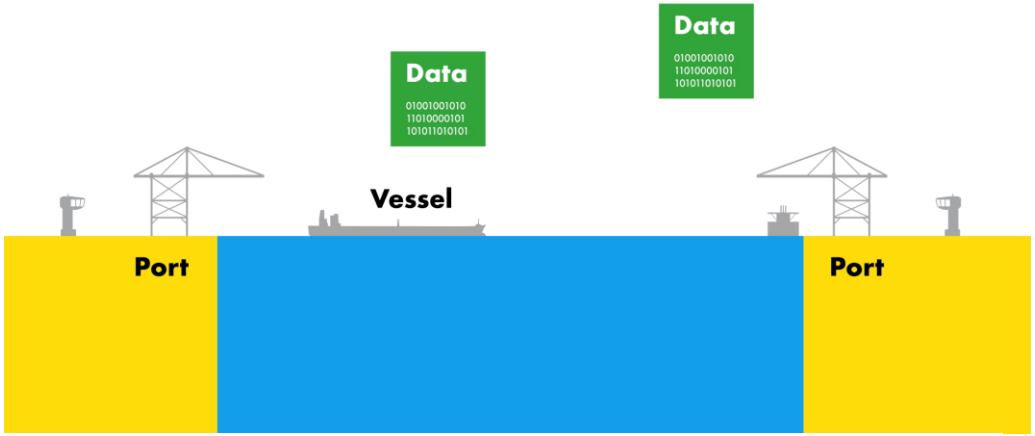
Done – Business process and appendix

International Taskforce Port Call Optimization

Port Call Optimization



Done – Selecting standardization bodies

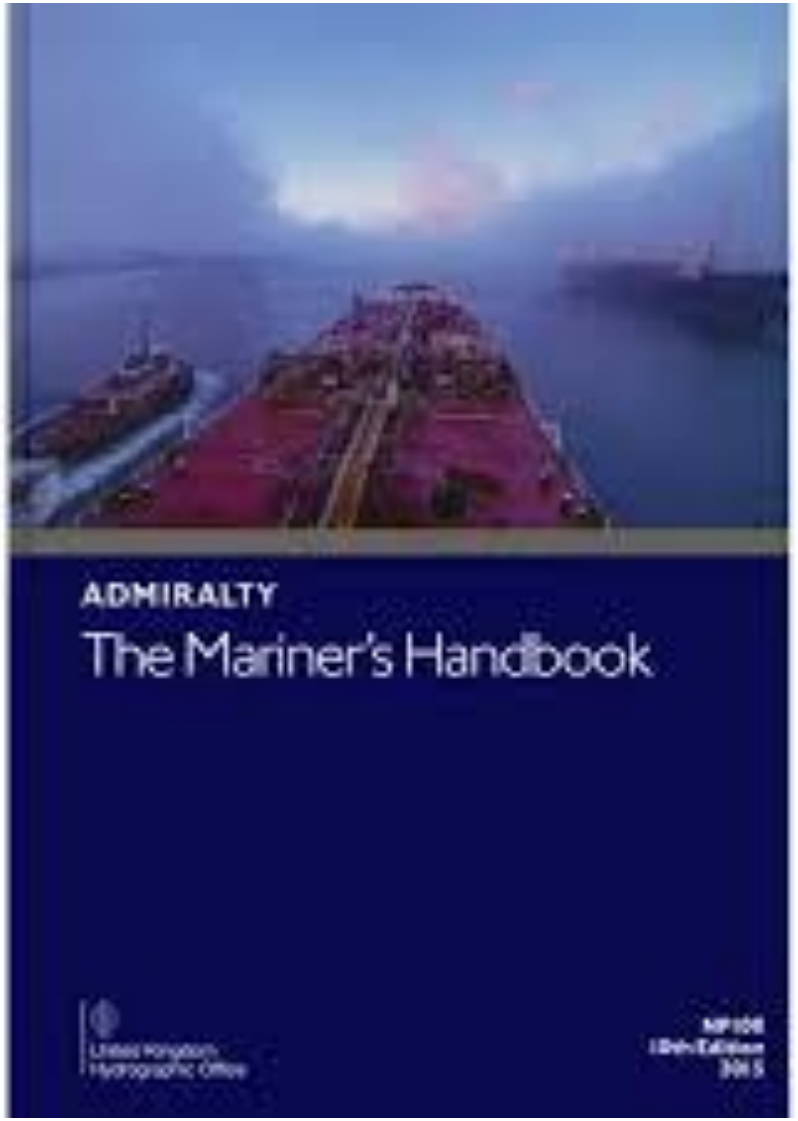


Done - Functional definitions

Intermediate publication
September 2017

Official publication

No date yet, 2019



To do - Functional definitions

Not yet in functional definition:
Requested / Recommended Times

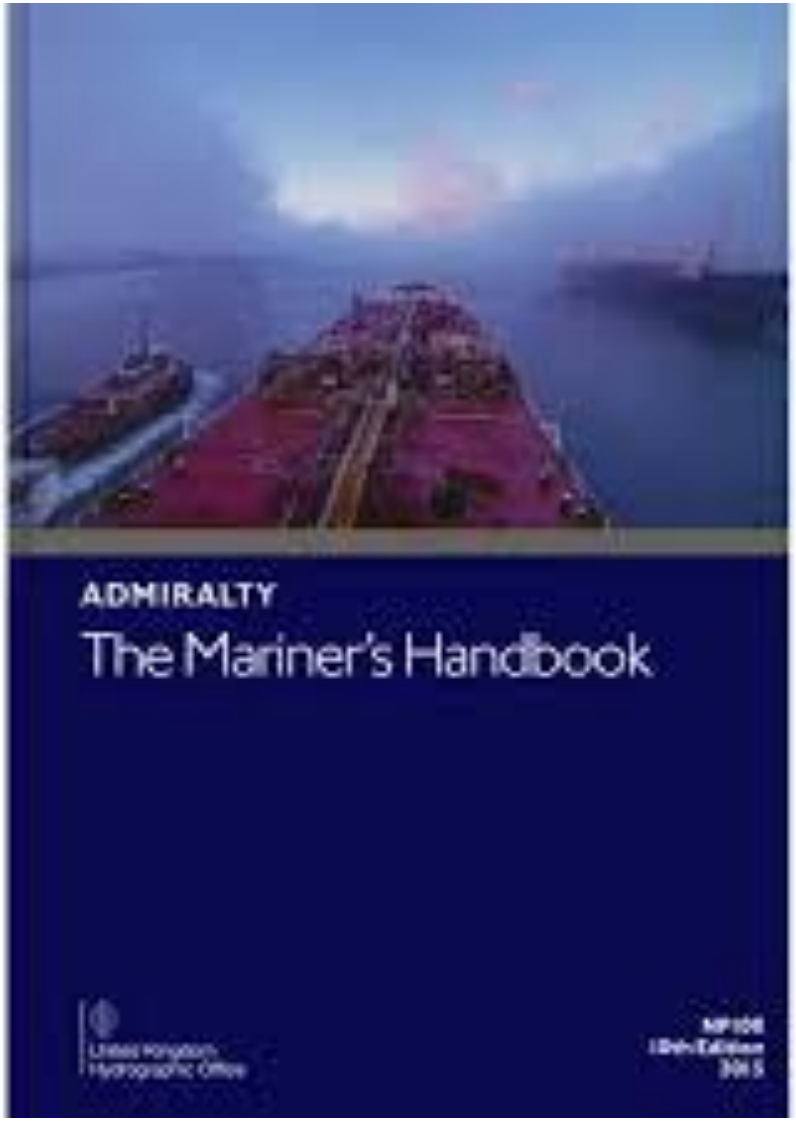
Necessary because:

- To support M2M communication, closed data loop
- Reference in clause for JIT arrival
- Choice is Requested Time as it gives more support to the Master (Taskforce 08/06/18)

Decision: not yet

Action:

- Discuss with Bimco WG – Ben v Scherpenzeel



To do - Master data – Starting principles

- Existing Standards for representation of geometry
  - IHO S-57 which holds our chart data. Uses a complex binary format ISO8211
  - RTZ format, used by ECDIS community to hold waypoints. Defines its own XML form. Uses Geographic Mark-up Language (GML) to store waypoints
  - IHO S-100, future framework standard for marine geospatial data. Has multiple encodings including GML profile
- Considerations
  - Interoperability with other systems
  - Precision, reference to datums, unambiguous, repeatability
  - Forwards compatibility with future standards
- Recommendation
  - Use GML
  - Make sure geoJSON can also be encoded for future
  - geoJSON / GML have equivalent structures

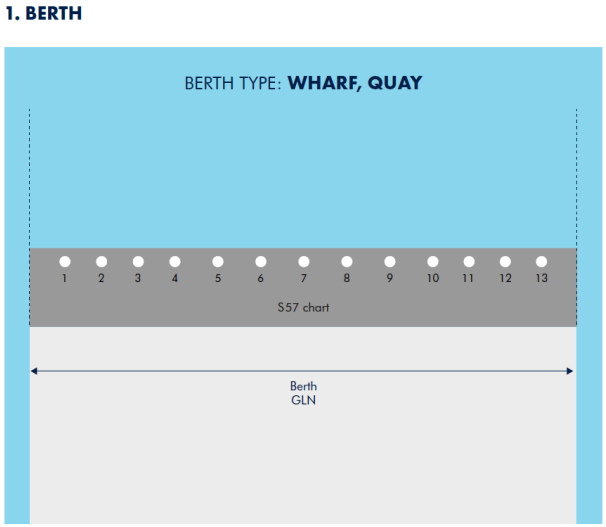
To do - Master data – Berth

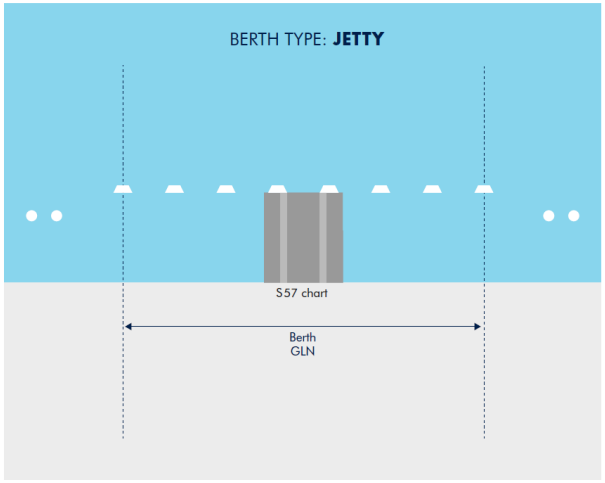
Berth can be specified with two points being the two extremities of the berth:

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

Decision: agree

Action: none





To do - Master data – Berthing position

Side of ship

Portside / Starboard side / Stern / Bow

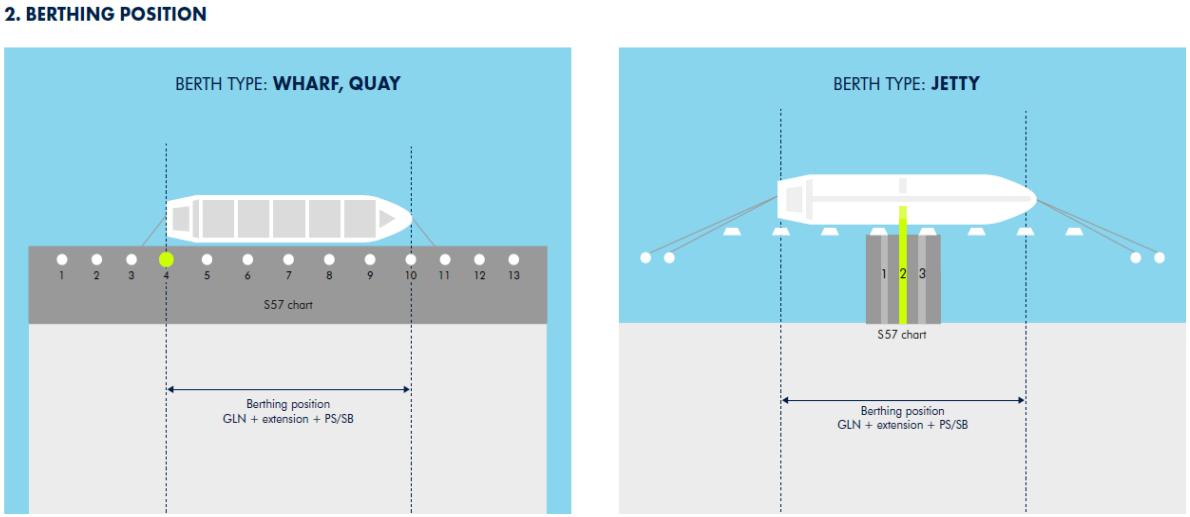
Positioning

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

- Quay walls: aft bollard – 0,5 bollard accuracy
- Jetties: manifold number
- Roro: ramp number

Decision: agree

Action: include other berthing positions – Ben van Scherpenzeel



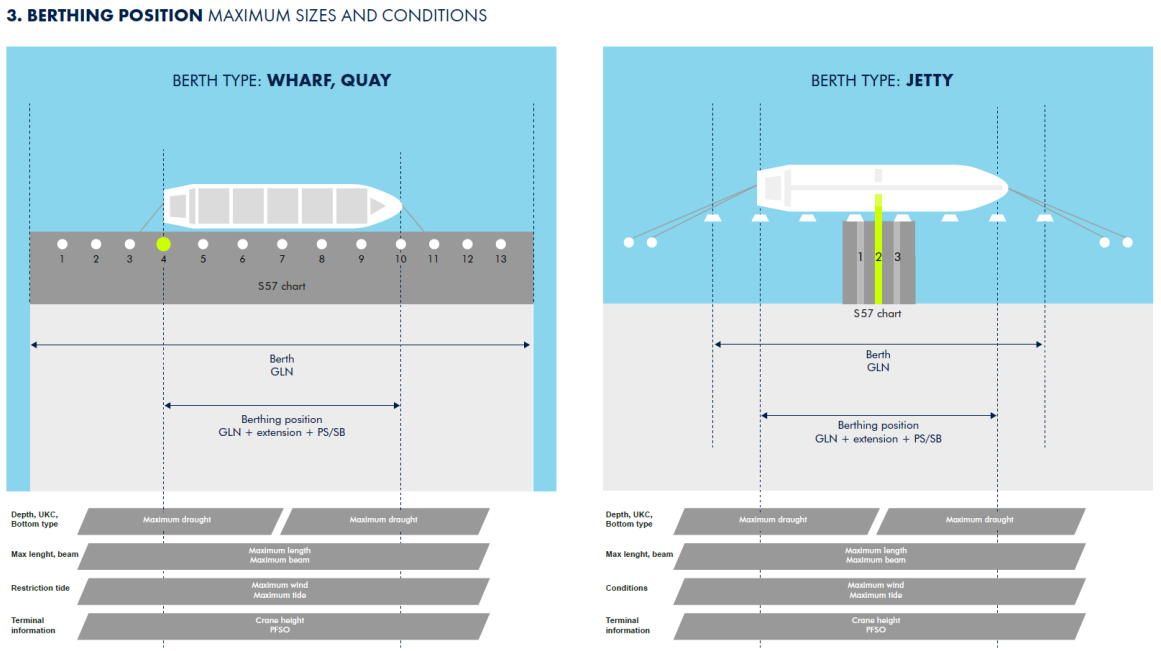
To do - Master data – Maximum sizes and conditions

<u>Maximum sizes and conditions</u>

Based on berth / berthing position

Decision: not yet part of the discussion

Action: agenda next meeting – Ben v Scherpenzeel



To do - Master data – Direct or indirect reference

Direct reference (lat/lon)

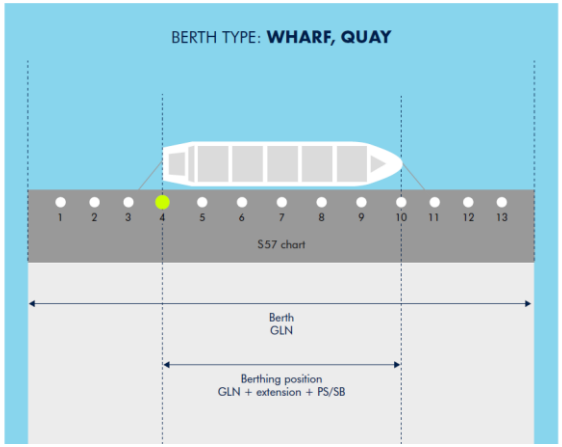
Reliable on short term, unreliable on long term due to change of infra

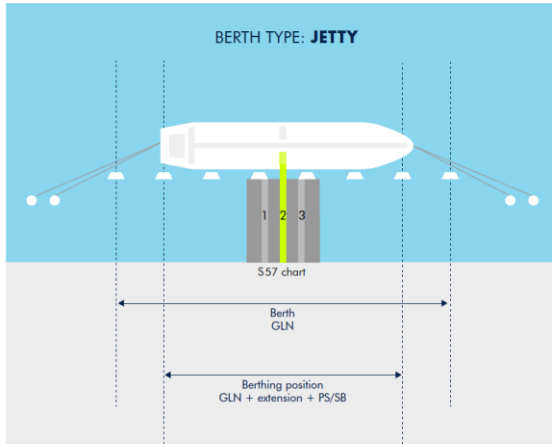
Indirect reference (name /nr)

Reliable on long term as change of infra does not affect ID

Decision: indirect reference

Action: None





To do- Master data– Indirect reference – Name or number

Starting principles:

Global, no change of ID after change of ownership, applies to all terminals and berths (sea, inland, container, bulk)

Name

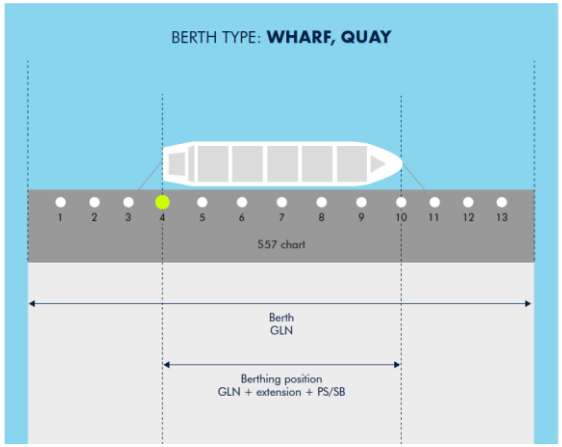
Unreliable due to many different names – e.g. local names, historic names, etc.

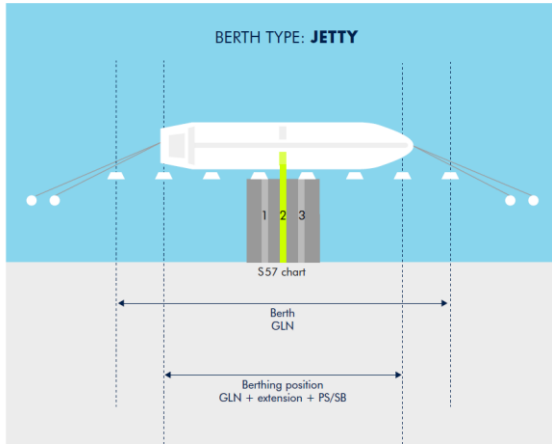
Number

Reliable if it ‘s unique (like IMO number of ship)

Decision: use number that is guaranteed unique and non significant.

Action: select unique number type – see next slides



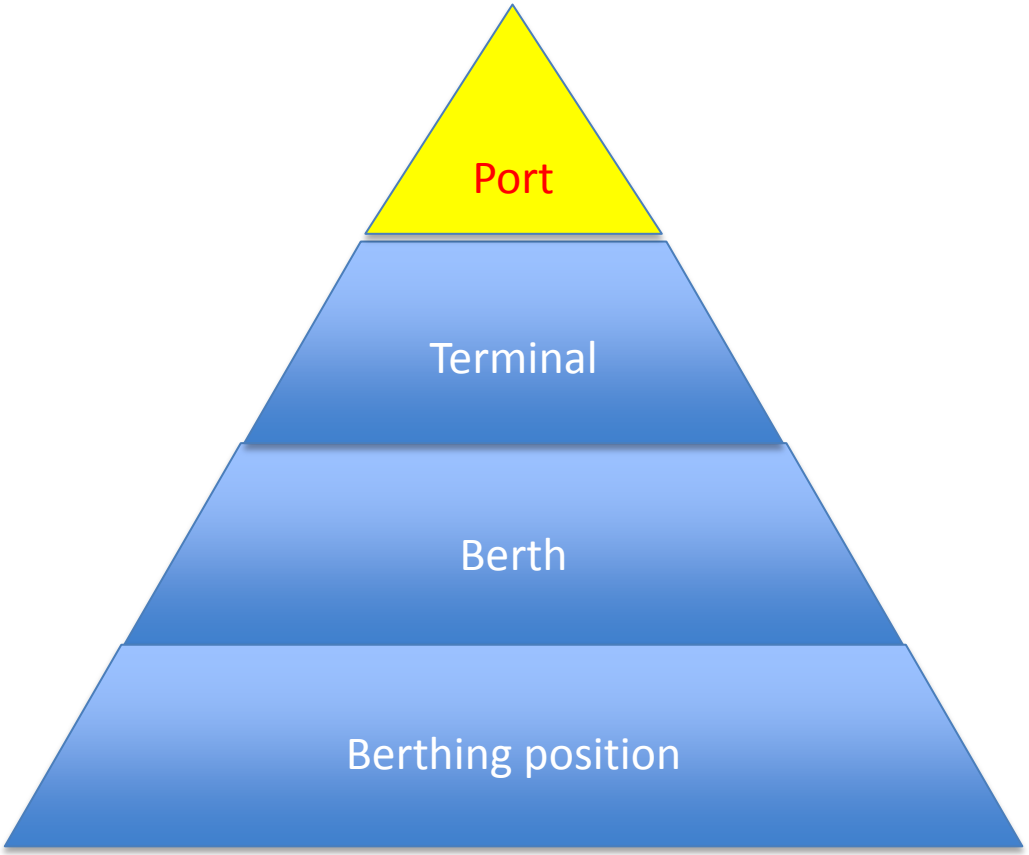


To do - Master data – Direct reference – Port

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

- WGS84
- Latitude : degrees, decimal minutes North/South
- Longitude: degrees, decimal minutes East/West

Input Paul/Jonathan re. data format



To do - Master data – Indirect reference – Port

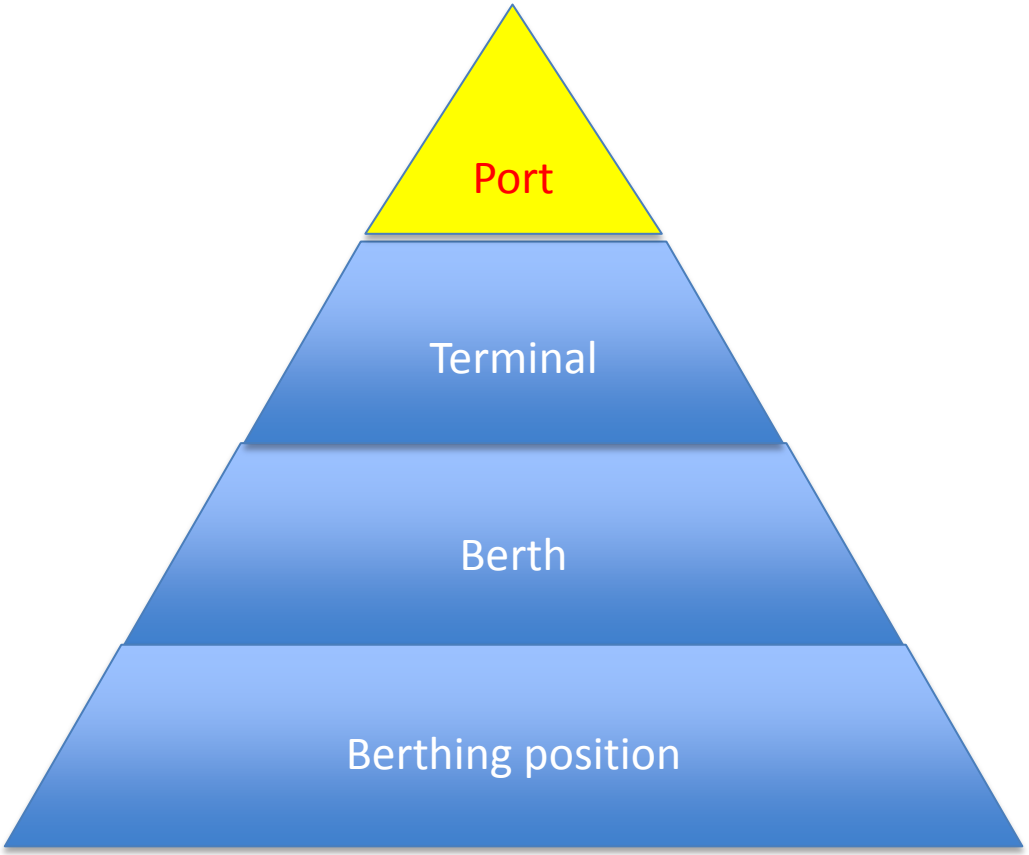
UNLOCODE

Country code: ISO 3166-1, 2 characters

UN Location Code: UN Code for Trade and Transport

Not perfect, but the best we have. Also used in many documents.

Decision: agree

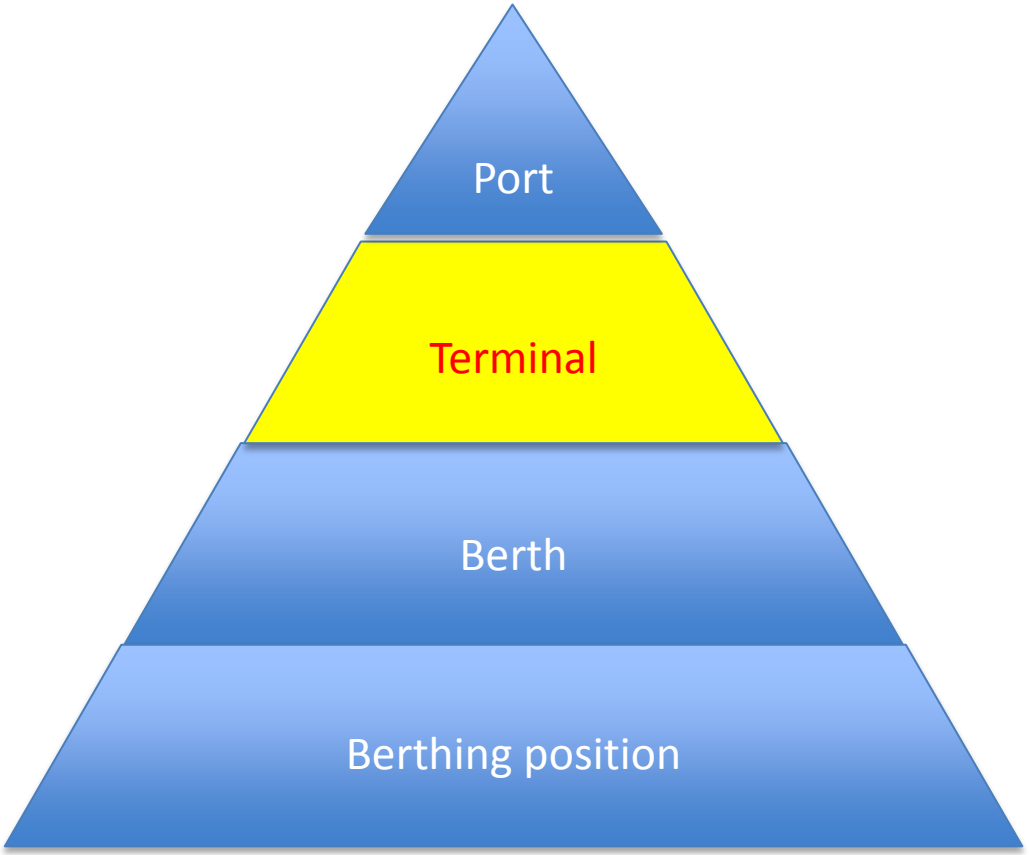


To do- Master data–Direct reference – Terminal

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 : degrees, decimal minutes North/South
- Longitude: degrees, decimal minutes East/West

Input Paul/Jonathan re. data format



To do- Master data–Indirect reference – Terminal

UNLOCODE + extension

Used by different lines in different ways .

Inland barges in Europe tried to align the extensions for container terminals only. Changes need to be made after change of ownership

GISIS

Only for terminals with ISPS. Number does not change with owner

BIC

Maintains database for container terminals only. Data is not complete

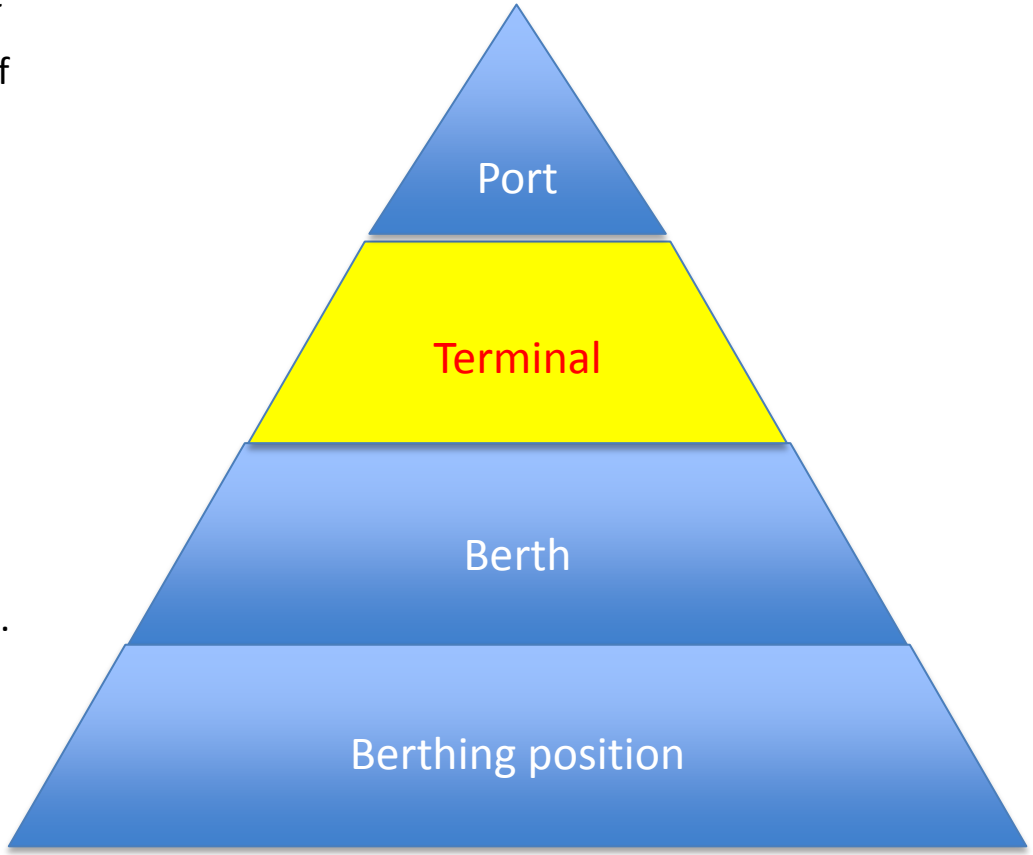
GLN

Used in logistics industry, not yet in ports. ISO/IEC 6523, global governance.

Change of ownership terminal: existing GLN can be used by new owner. Not necessary if GLN is issued by port authority

Proposal: GLN with attribute current UNLOCODE + extension

Decision: studying all options

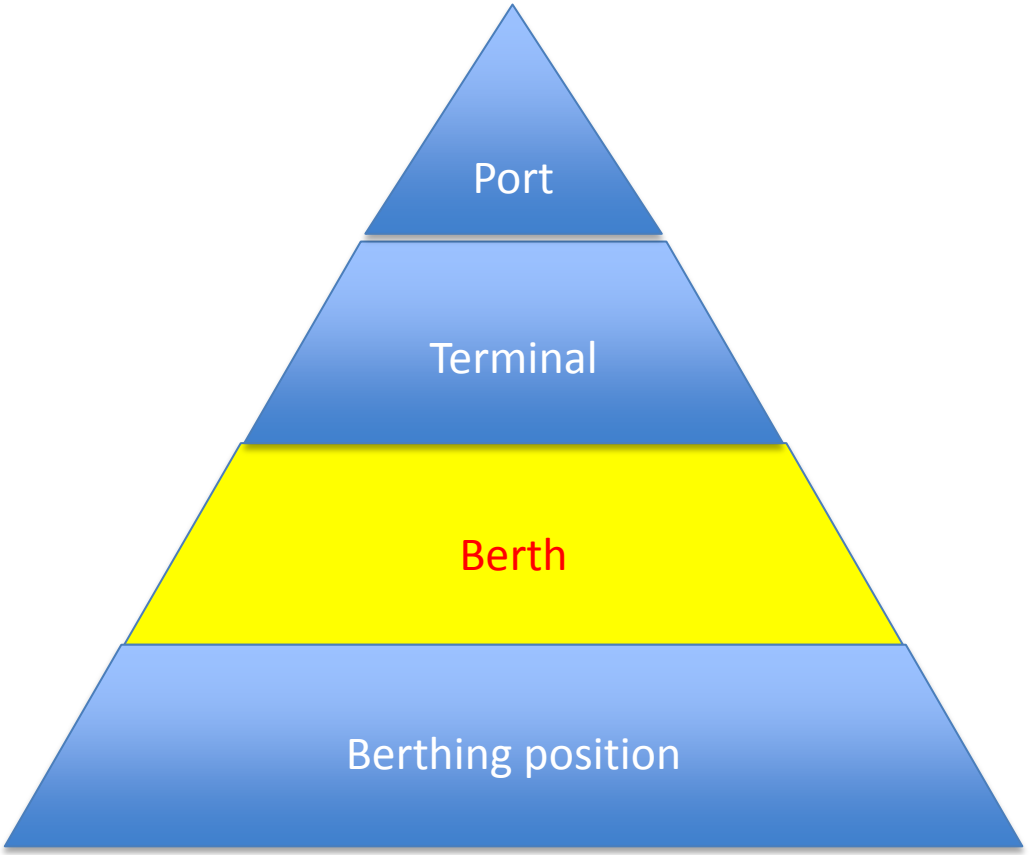


To do - Master data – Direct reference - Berth

Can be specified with two points being the two extremities of the berth.

- WGS84
- Latitude : degrees, decimal minutes North/South
- Longitude: degrees, decimal minutes East/West

Input Paul/Jonathan re. data format



To do - Master data – Indirect reference - Berth

Local numbers

No assurance numbers are unique, every port has different schemes

Inland Ecdis ISRS number

UN Locode + fairway code + object reference code + fairway section hectometer. For inland waters only.

MRN

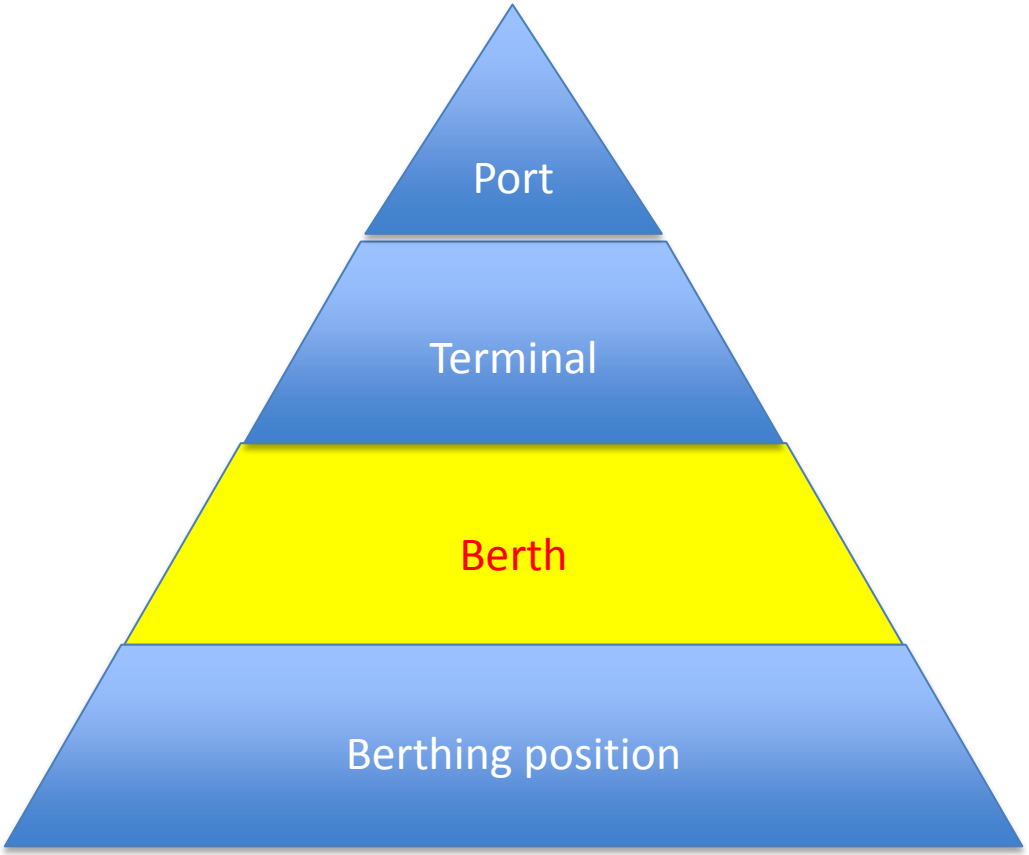
Used in test beds – no governance on ID level, governance on organization level

GLN

Used in logistics industry, not yet in ports. ISO/IEC 6523, global governance.

Proposal: GLN with attribute current local number or name

Decision: studying all options



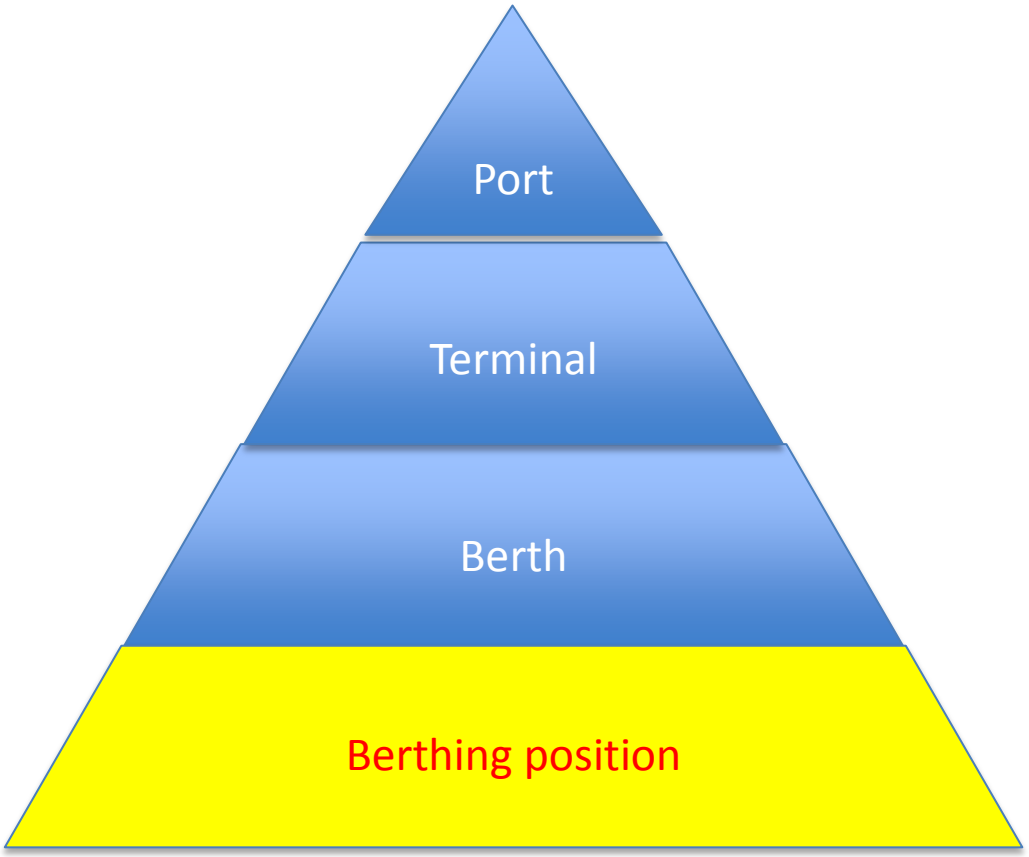
To do - Master data– Direct reference- Berthing position

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

- Qua walls: aft bollard, number, 0,5 bollard accuracy
- Jetties: manifold number
- Roro: ramp number

- WGS84
- Latitude : degrees, decimal minutes North/South
- Longitude: degrees, decimal minutes East/West

Input Paul/Jonathan re. data format



To do - Master data – Data definition – Berthing position – Direct reference

Decision: not yet

Action: edit format – Paul Marks / Jonathan Pritchard

```
<gml:featureMember>
<gml:moorings fid="moorings.7">
<gml:geometryProperty>
<gml:GM_Point srsName="EPSG:4326">
<gml: coordinates>
4,263964868999926, 51,88181401831148
</gml:coordinates>
</gml:GM_Point>
</gml:geometryhPropert>
<gml:id>10</gml:id>
<gml:bid>7</gml:bid>
Etc.....
```

To do - Master data– Indirect reference- Berthing position

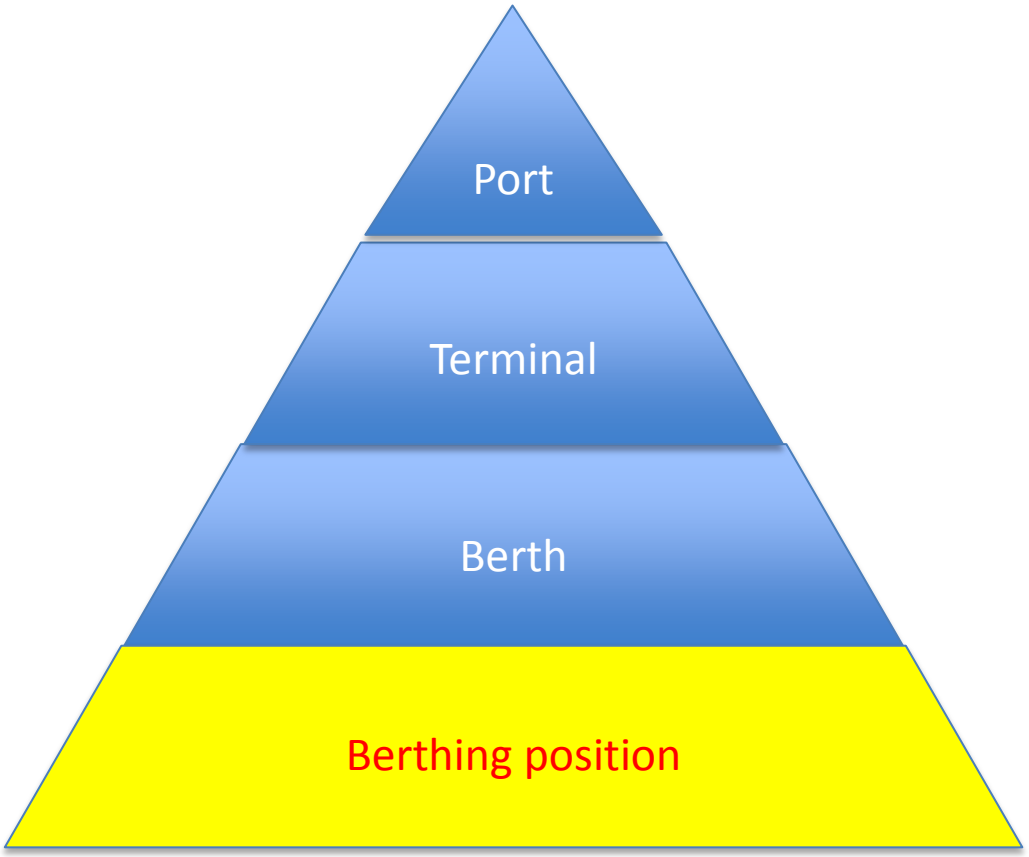
Berth number +
Side of ship +
Bollard / Manifold number (bollard accuracy 0,5 bollard or berth marks)

Proposal: GLN of Berth with extensions:
1) Bollard / mainfold number
2) Side of ship
E.g. 01233456789123B6.5PS

GLN Berth: 0123456789123
Bollard 6.5
Port Side

Attributes: current name or number of berth

Decision: studying all options



To do - Master data – Data definition – Berthing position – Indirect reference

Decision: not yet

Action: edit format – Paul Marks / Jonathan Pritchard

To do - Event data – Data definition - Starting principles

- Lean and flexible
- Facilitate local port needs
- Share data without port call ID
- Capture master data in event structure
- Open and existing industry standards:
  - Functional definitions of UKHO/IHMA document
  - Unique ID for ships: IMO number
  - Unique ID for ports: UNLOCODE
  - Unique ID for berths: GLN (ISO 6523)
  - Format for time: ISO 8601
  - Format for structure: EPCIS (ISO/IEC 19987:2015)
  - Data format: JSON over HTTP
- Optional context identifiers
- Full technical specs on https://github.com/PortCallOptimisation/port-call-event-format

To do - Event data – Data definition – Berthing time

Decision: not yet

Action:

- Edit format to include update re. berthing position - Done
- Mention source of the data – Done
- Check time accuracy format with airline industry – Robbert Engels
- ETD's to be part of ECDIS – Jaco
- Look into data structures for master data to inform about changes - Jaco

Definition	EPCIS Event Path	Port Call Message Format
What	/epcList	"ship":{imo":"9704611"}
When	/eventTime, /eventTimeZoneOffset	"eventTime":"2018-05-08T14:00:00Z"
Where	/bizLocation	"port":"NLRTM" "terminal":"0123456789123" "berth":"0123456789123" "berthing position":"0123456789123B6PS"
Why	/bizStep, /action	"eventType":"ATA.Berth.terminal"
Event Id	/eventID	"uuid":"75ecaa9b-cc77-45bc-90fa-26d9cdad5e1a"
Record time	/recordTime	"recordTime": "2018-05-09T09:13:47:00Z"
Source	/source	"source": "PCS"

To do – Review of port call message format to IALA

Feed back received:

- Not aligned with functional definitions of IHMA/UKHO
- Not accommodating berthing position
- Not possible to share data without port call ID
- Not possible to include local events for daily operations
- Too rigid, too complex, cannot be maintained
- Too many fields are defined in the schema as enumeration fields, where coded fields would have been more appropriate
- Elements of format can be used, but better to start from scratch together with first hand stakeholders

Action: IALA and IHMA will be informed by Ben van Scherpenzeel

To do - Maintenance of standards – Discussion

Maintenance is as critical as functional and data definitions.

While parties develop products, new needs will arise. Current EDI formats very painful to adopt.

Decision: no decision yet

Action:

- Work on proposal based on input – Per Setterberg, Ben v S
- Study existing organizations, e.g. UNCEFACT, IEC, CIRM – Jaco Voorspuij
- Discuss during next Taskforce meeting – Ben van Scherpenzeel

To do - Endorsement IMO/IHO – Follow up

Decision: attending meeting IMO/IHO

Action:

- Align with Michael Bergmann for presentation at IMO HGDM meeting October 21 – November 2 meeting – Ben van Scherpenzeel

To do - Endorsement IALA – Follow up

Decision: attending meeting IALA (post meeting)

Action:

- Present work to IALA congress 1-5 October 2018
- Present work to IALA congress 2020

To do - Awareness of DG Move digital platform

Decision: check awareness of PCO within DG Move

- Check with DG Move – Jaco Voorspuij

Update: awareness of PCO within DG MOVE is very limited.

Action: give input to Digital Transport & Logistics Forum.
Decide who's in the best position to do so.

To do - Press release

Decision: press release re. Industry Input Workshop

Action: send press release to participants – Ben van Scherpenzeel

To do - Next meeting, meeting minutes

Decision: next meeting November 29 2018 in Rotterdam

Action:

- Send invite to participants – Ben van Scherpenzeel
- Send meeting minutes to participants – Ingrid Romers / Ben van Scherpenzeel

To do - Network event

Before and after the Industry Input Workshop there was a network event which were both well attended. Both will be organized again next meeting.

Action: Ben van Scherpenzeel

Closing of meeting, network drinks