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

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

International Harbour Masters Association

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

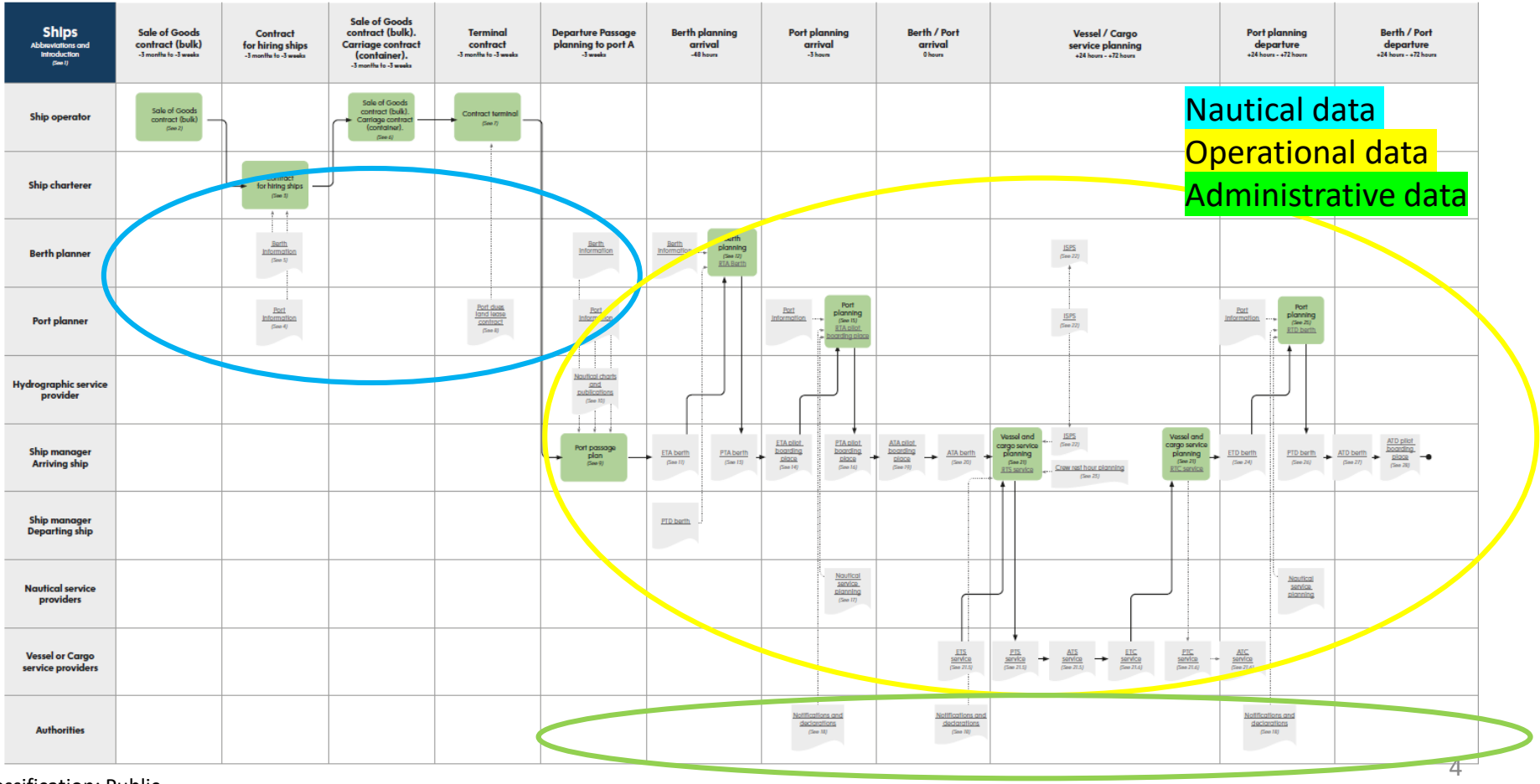
THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

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,

Nautical data - part of port call process: for chartering, planning and navigation



Nautical data - definition

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

Nautical data - scope: basics first

Nautical data

a) Port depts 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

Nautical data - standardization body: IHO

Nautical data

Operational data

IMO INTERNATIONAL MARITIME ORGANIZATION

ISO

Administrative data

IMO INTERNATIONAL MARITIME ORGANIZATION

ISO

Nautical data - non-technical standards: are we talking about the same object

Nautical data

a) Port depths and water levels: maintained depths defined in IHO

b) Port infrastructure: berth, berth position, berth pocket, child codes and UKC defined in IHO and/or 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

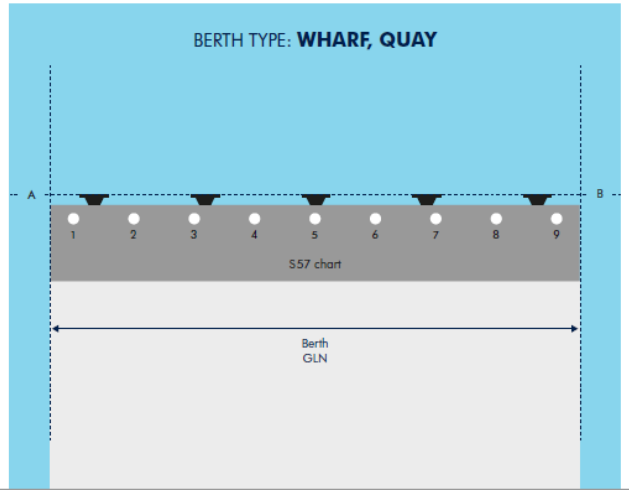
a) IMO FAL forms: not in scope for ITPCO

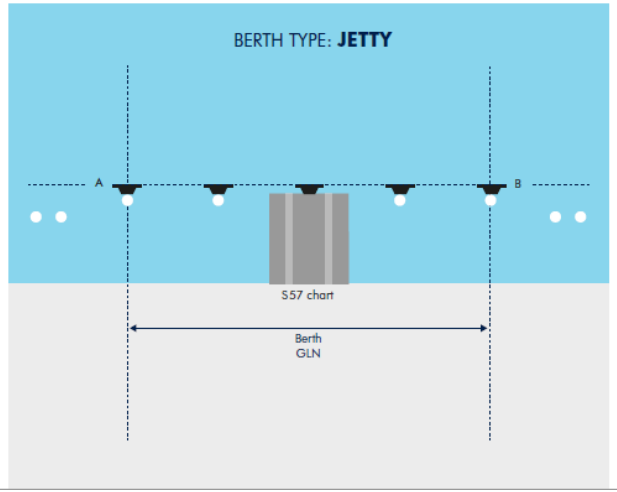
b) IMO Port Facility No.: part of terminal data as per IHO

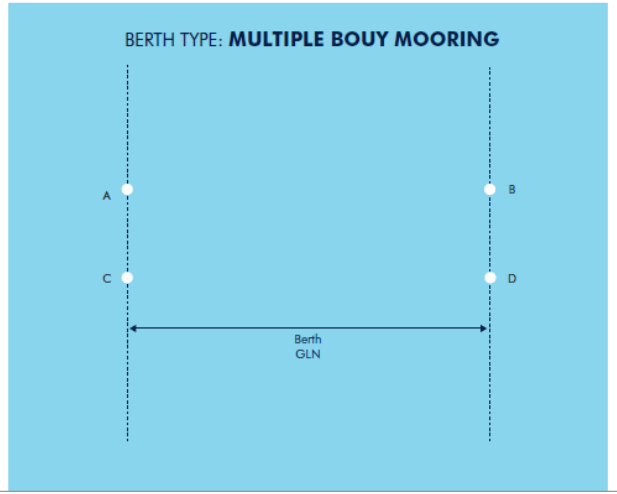
Harmonization between IMO and IHO on data elements that have both geospatial and operational interest
Looking into option to use same agreement as between IMO, UNECE and Customs
IHO and IALA already harmonize

Nautical data - non technical standards: berths and berth positions

1. BERTH

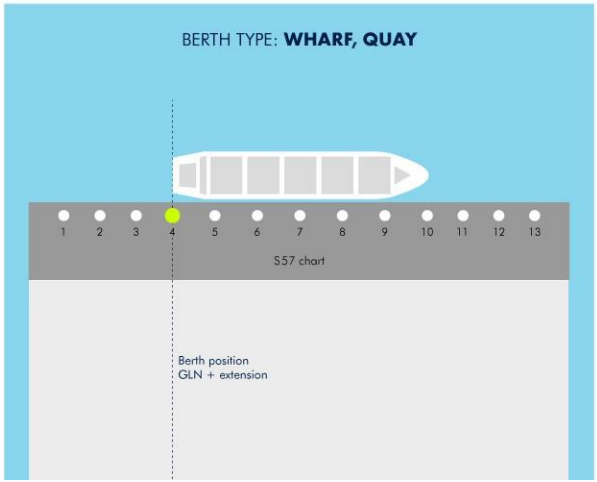


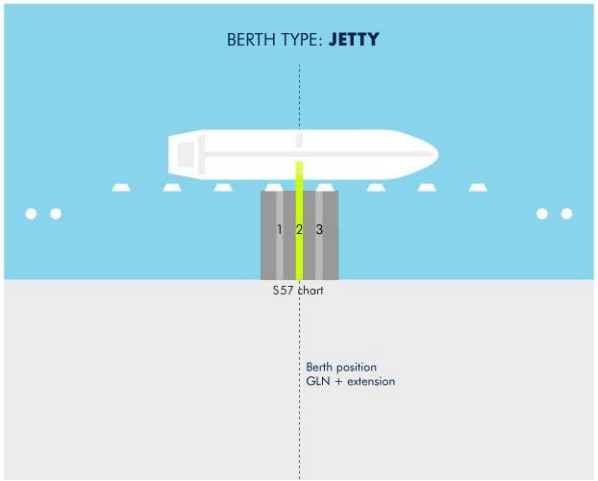


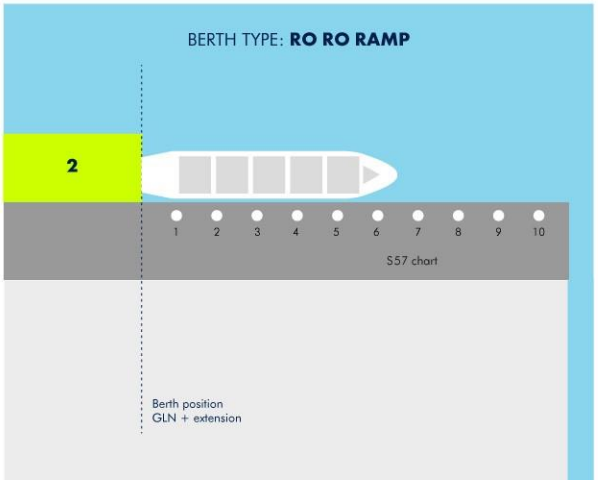


Nautical data - non technical standards: berths and berth positions

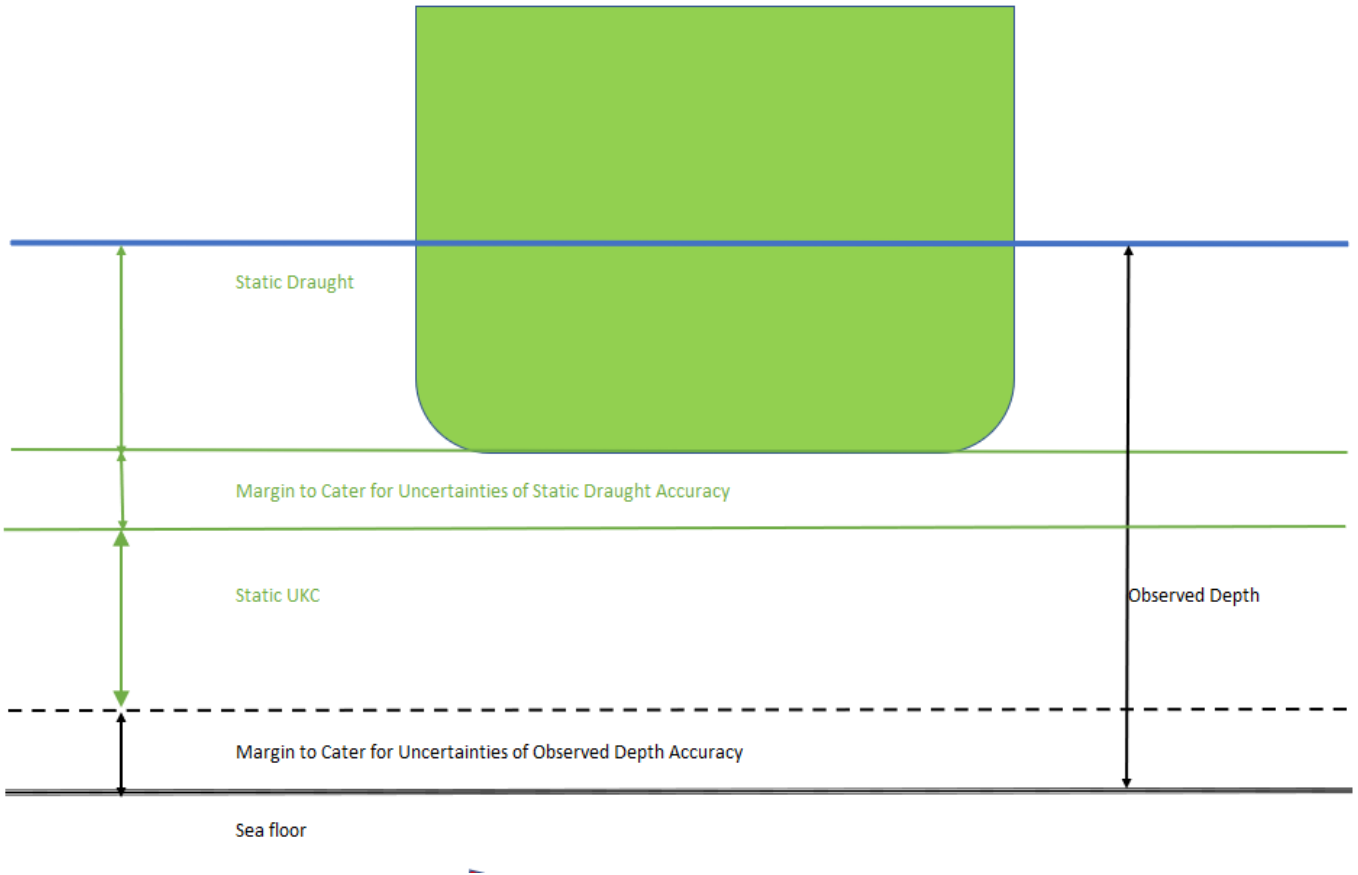
2. BERTH POSITION







Nautical data - non technical standards: under keel clearance



Nautical data – technical standards: S57 for Hydrographic Office, API for Maritime Industry

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

Nautical data – technical standards for exchange with Hydrographic Office: API S-57

4.4.2.3. INDIRECT REFERENCE

Global Location Number (GLN) (ISO/IEC 6523)

E.g.: 1234567890125 for ECT Delta Terminal DDN

4.4.2.4. DIRECT REFERENCE

Decimal degrees to a defined precision, (minus to indicate South and West). Datum WGS 84.

E.g.: A: 51.95885, 4.05711, B: 51.96001, 4.07199 For ECT Delta Terminal DDN

4.4.2.5. OTHER REFERENCES

Name of the berth

Local reference

4.4.2.6. PROPOSED STORAGE IN S-57

Object acronym : BERTHS (Line)
Position(s) : a straight line (2 positions) – Based on fenderline
Attribute acronym : OBJNAM = name or number of the berth (E.g.: DDN)
Attribute acronym : NOBJNM = name of the terminal (E.g.: ECT Delta Terminal)

Attribute acronym : INFORM = Local reference (E.g.: Local Reference:8180)
Attribute acronym : NINFOM = Global Location Number (E.g.:GLN:1234567890125 for ECT Delta Terminal DDN)

Nautical data – technical standards for exchange with Maritime Industry: API POR


```
}, {
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    "name": "RWG",
    "description": "Rotterdam World Gateway",
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Nautical data - Guidance for data owners

Nautical data

- Port Information Manual 3.02
- Guide for Nautical Data 1.3: Content aligned with IMO Resolution A.862(20): Guide for Nautical Data 1.3
- Guide for Nautical Data 1.4: Content aligned with 1.3, MTIS, Port Memo, IHO standards, IMO regulations

Operational data

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

Administrative data

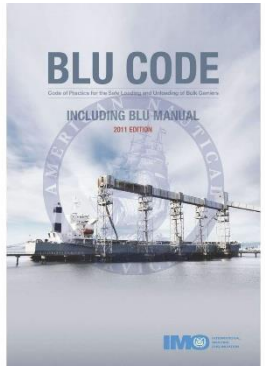
- Proposal to simplify current Manual

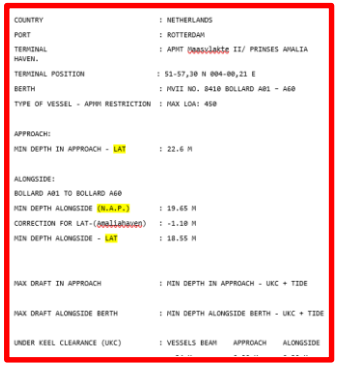
Guidance for data owners – to do

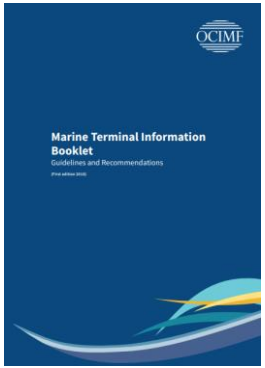
Guide for Nautical Data 1.4

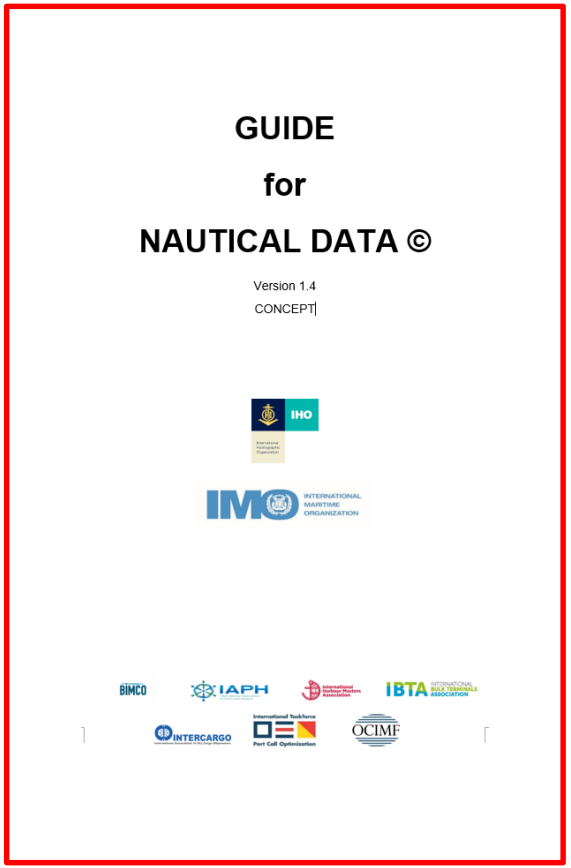
Based on industry needs:
- IHMA/IAPH Guide for Nautical Data 1.3
- IMO BLU Code - bulk
- OCIMF MTIS - tanker
- Port Memo – container

Based on international bodies:
- IHO standards
- IMO regulations

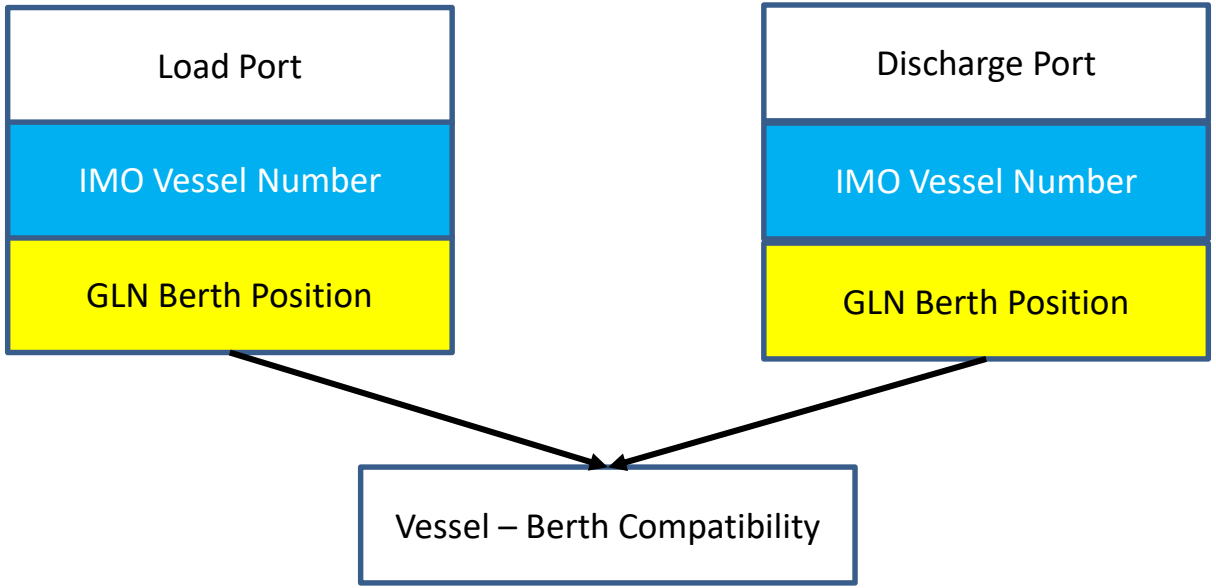




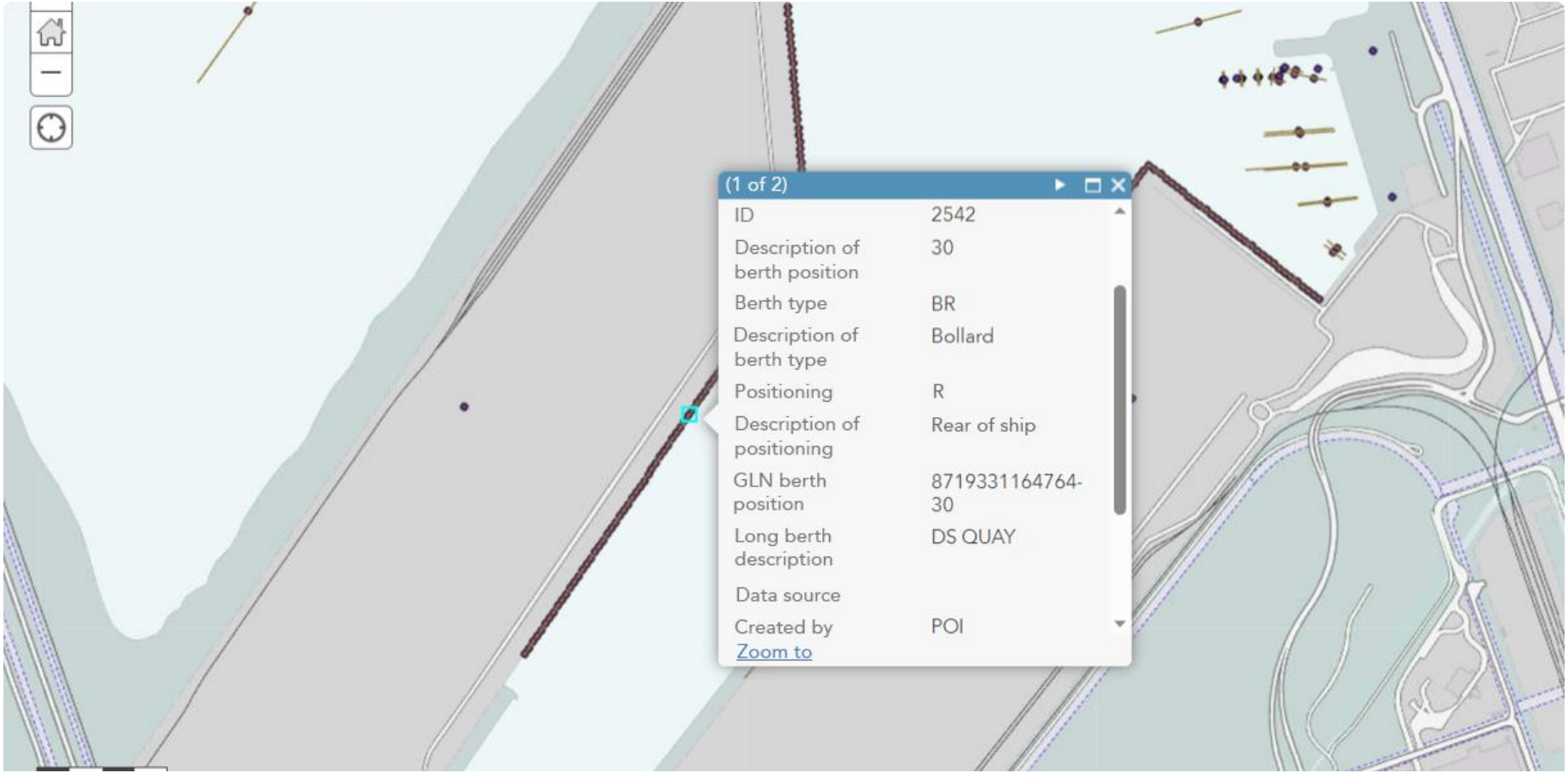




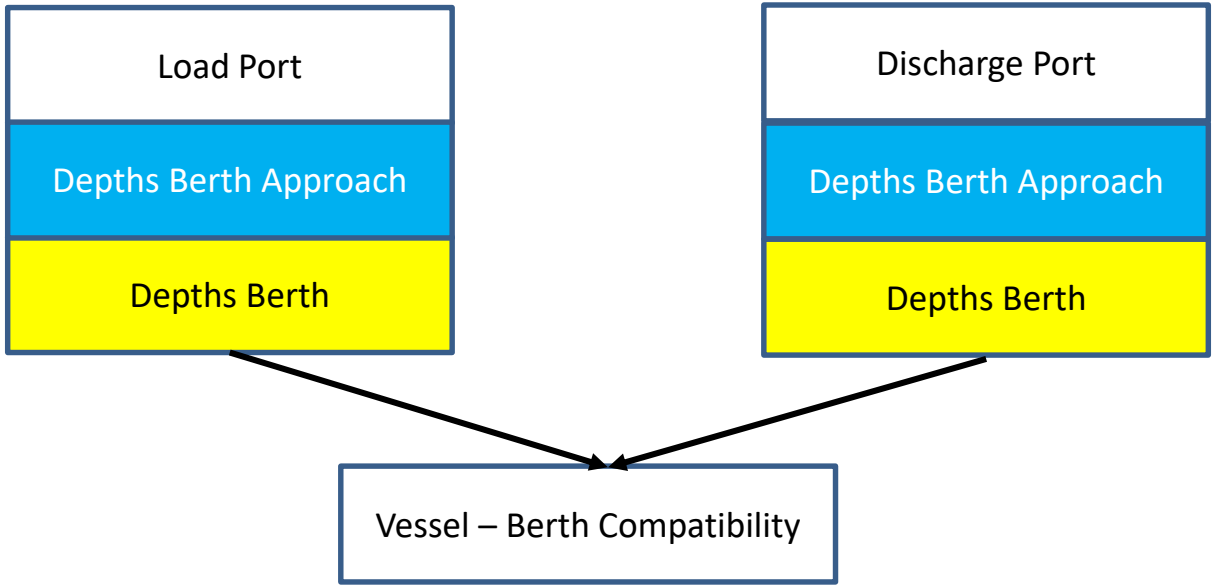
Implementation - Berth Position: S-131



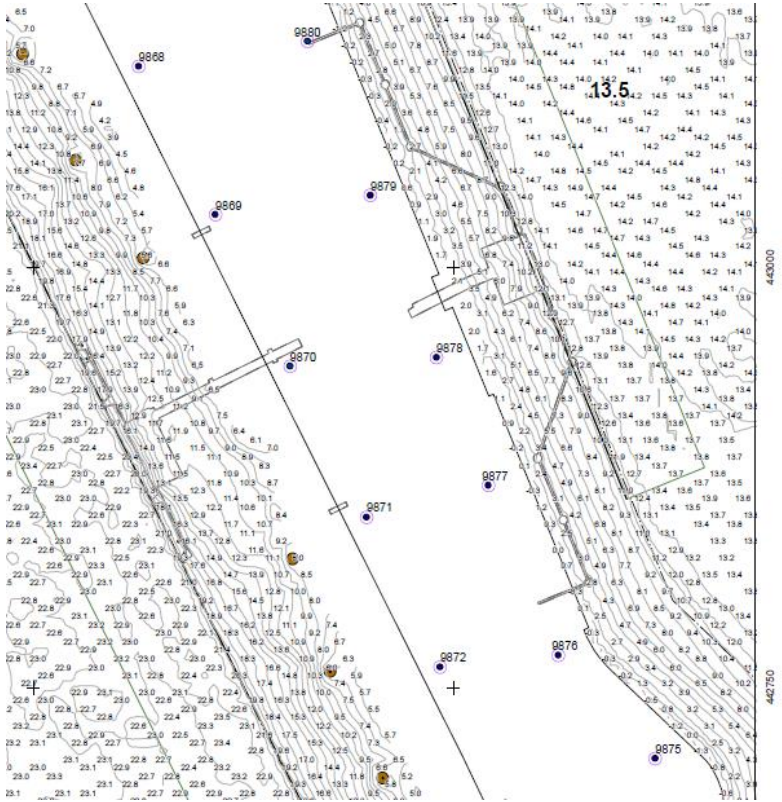
Implementation - Berth Position: S-131



Implementation – Depths: S-102



Implementation – Depths: S-102



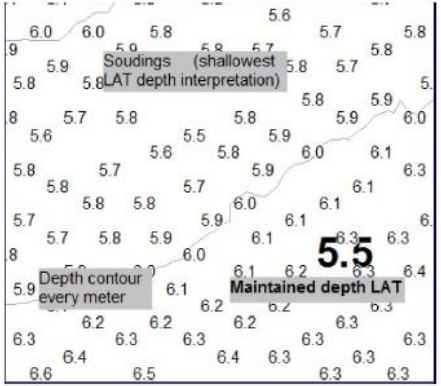
Not to be used for navigation.

Only maintained depths should be used for passage planning of vessels and cargoes. Soundings should be used only after consultation with the harbour coordination centre as they are affected by siltation and dredging operations.[1]

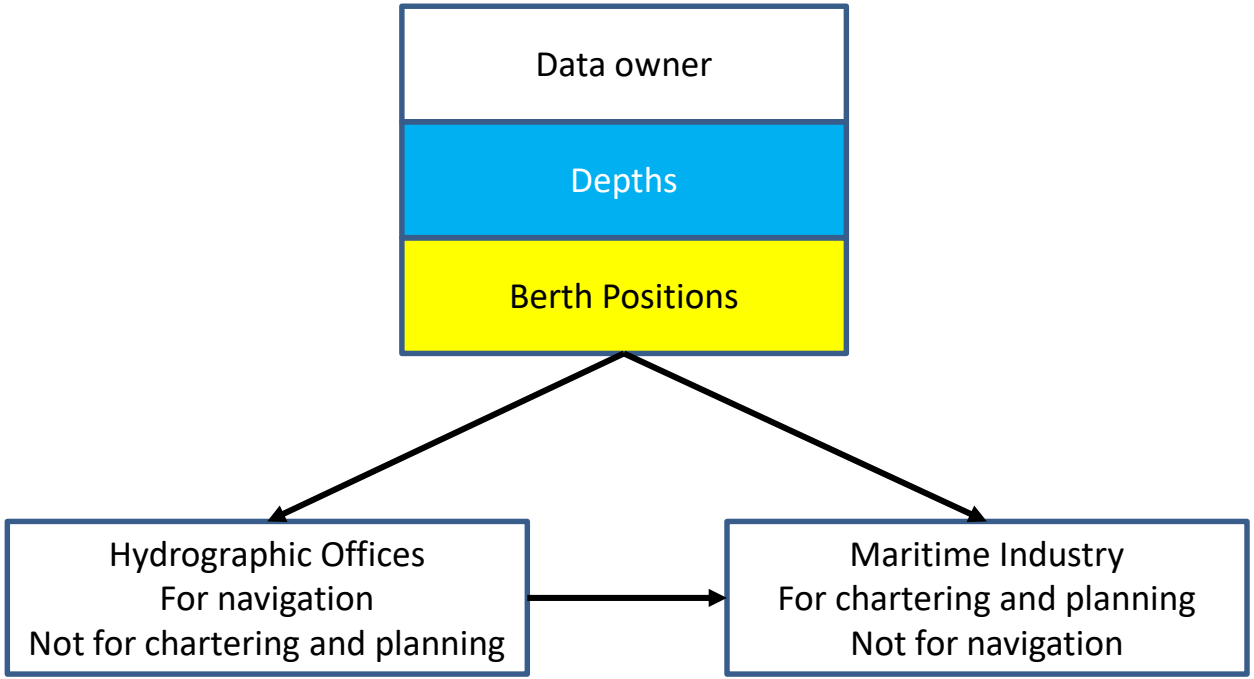
Responsibility for safe navigation remains with the master of the vessel.

At any time the port accessibility can be affected by unexpected causes such as a localised movement of sediment or less water due to extreme weather factors or river flow .

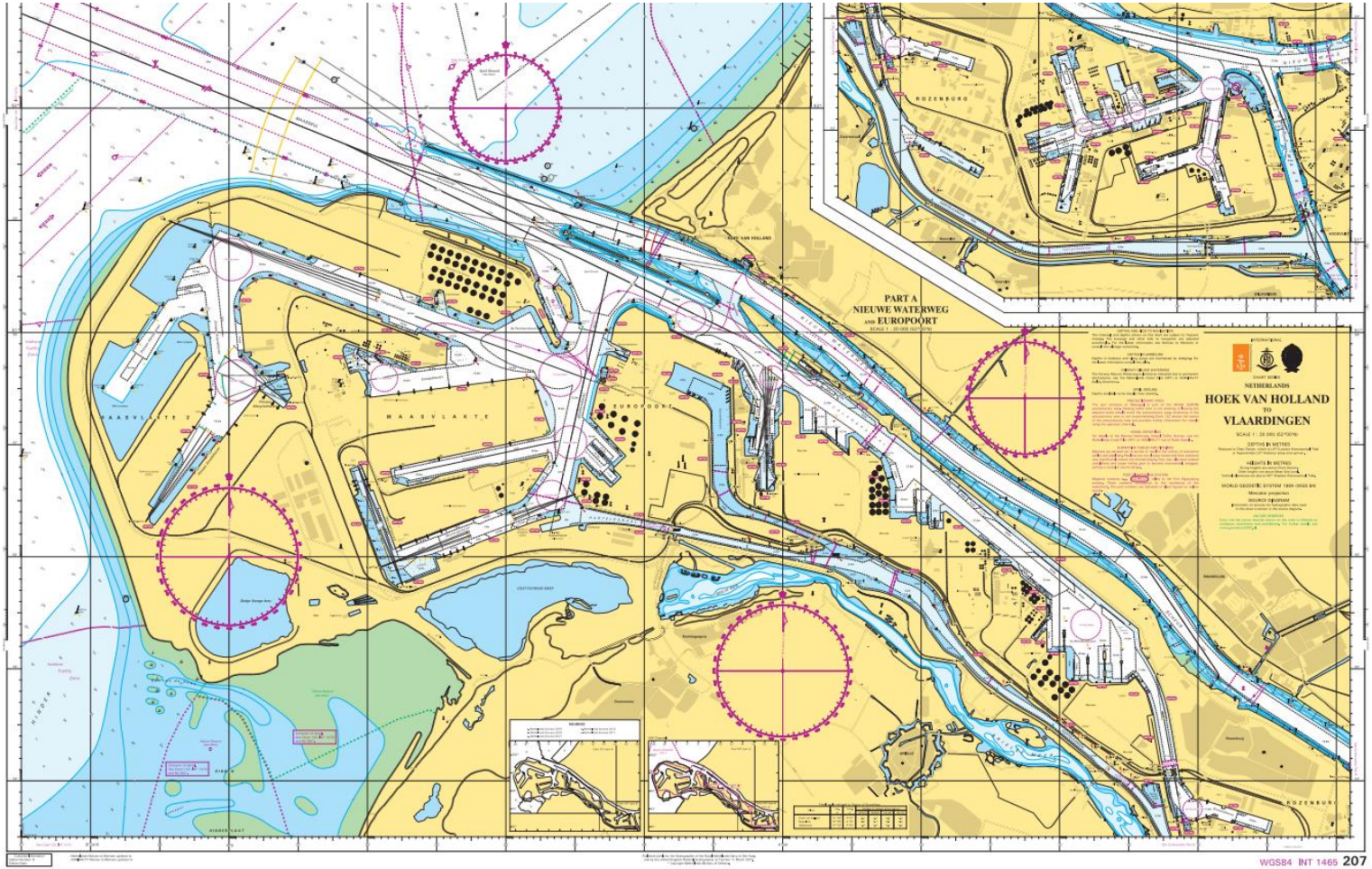
[1] If the sounding is less than the maintained depth this will be one of the reasons to start a dredging operation



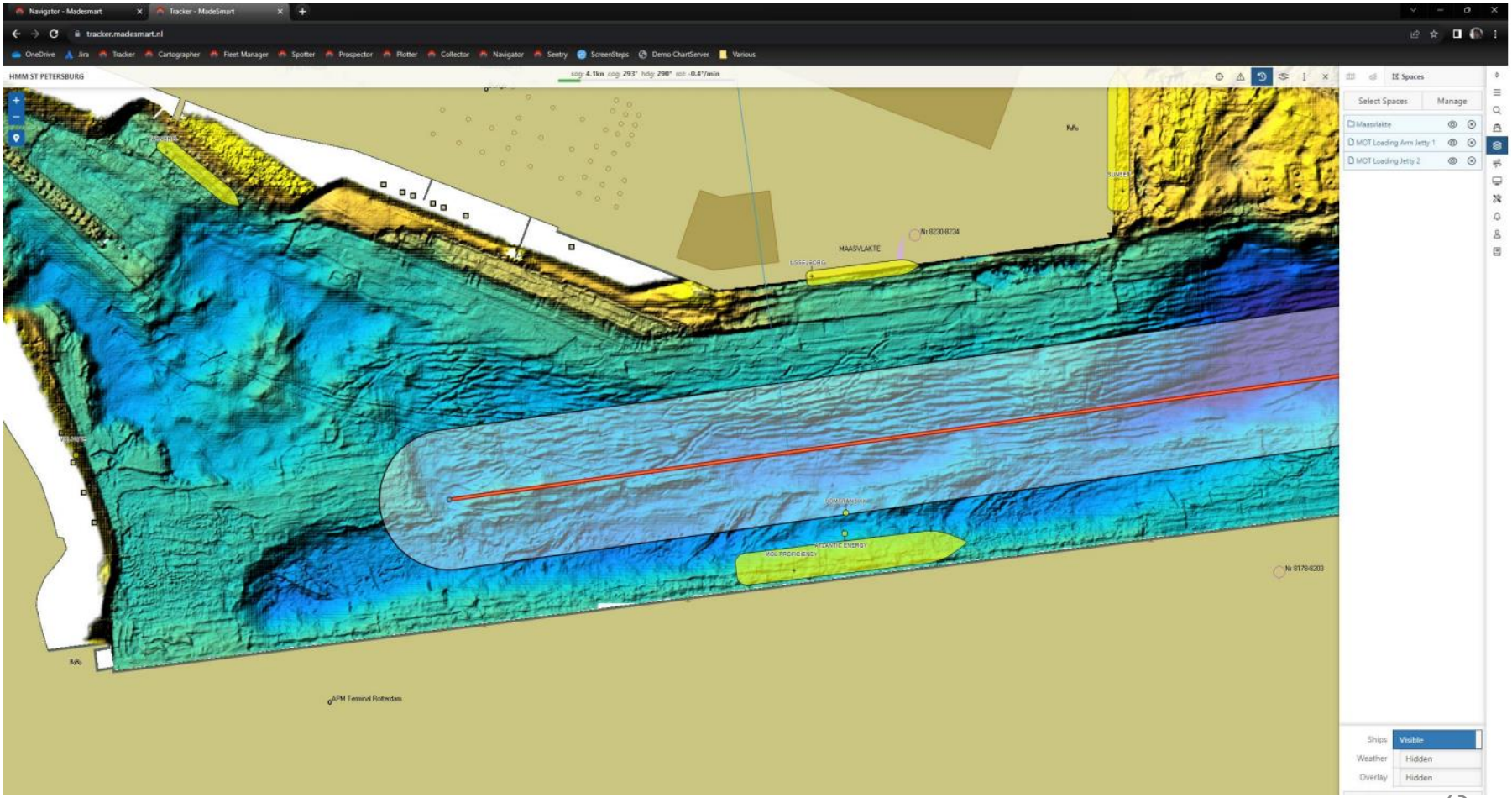
Sharing with Hydrographic Office and Maritime Industry



Result Hydrographic Office: for navigation



Result Maritime Industry: for chartering and planning



Lessons learned

1) Start with basics
2) Start with data owner
3) Start introducing international standards step by step
4) Share with Hydrographic Office and Maritime Industry
5) Share between Hydrographic Office and Maritime Industry