

International Taskforce

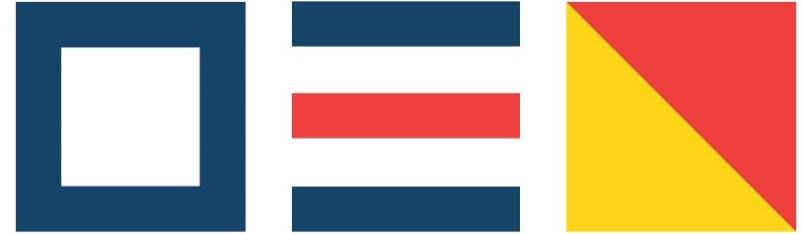


Port Call Optimization

Content – update 10/10/20

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International Taskforce



Port Call Optimization

Who is International Taskforce Port Call Optimization?

The Taskforce:

- Comprises subject matter experts with hands on expertise in shipping, ports and standards
- Works together with IMO NGO's to make submissions to robust standardization bodies
- Provides input to Chainport, DCSA, IAPH Data project, IMO GIA low carbon shipping, Navelink, STM, WorldBank, WPCAP
- As a neutral body, consults but does not promote solution providers

International Taskforce Port Call Optimization

Industry partners; shipping and agents


CMA CGM
Line and Agency


Inchcape
Shipping Services


Maersk


MSC Mediterranean
Shipping Company
S.A and Agency


Oldendorff
Carriers


Shell


Vopak Agents

Industry partners; ports


Port of Algeciras


Ports of Auckland


Port of Busan


Port of Gothenburg


Hamburg Vessel
Coordination Center


Port of Houston


Port of Ningbo Zhoushan


Port of Rotterdam


Port of Singapore


Port of Tanger Med

Standard partners


GS1


UK Hydrographic
Office


UK Hydrographic
Office

Endorsers


BIMCO


Chainport


Dry Bulk Terminals


Green Award
Foundation


IALA


International Association
of Ports and Harbours


International
Cargo Handling
Coordination Association


International
Chamber of Shipping


International Federation of
Ship's Masters' Associations


International Harbour
Masters Association


International Hydrographic
Organization


INTERCARGO


Lloyds Marine
Intelligence Unit


MarineTraffic


Navelink


Sea Traffic
Management


The Nautical
Institute


UK P&I Club is managed
by Thomas Miller

Why did we start?

- Request from shipping to improve port data quality and availability to IHMA
- IMO MEPC 323/74: call for action to improve quality and availability of data in ship-port interface
- World Bank / IAPH request to prioritize 10 data elements in ship-port interface



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),

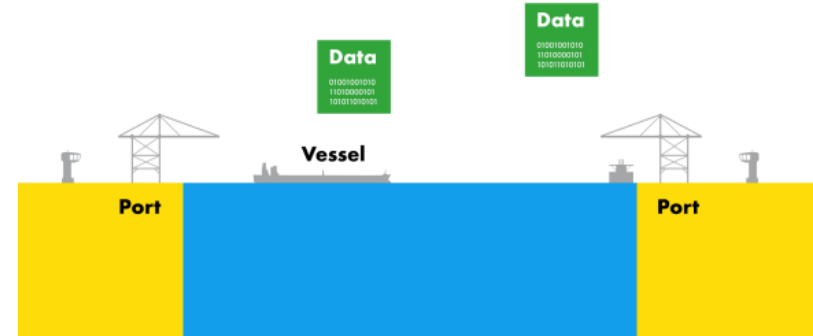
NOTING that the Initial Strategy calls for the encouragement of port developments and activities globally to facilitate reduction of GHG emissions from shipping, including provision of ship and shoreside/onshore power supply from renewable sources, infrastructure to support supply of alternative low-carbon and zero-carbon fuels, and to further optimize the logistic chain and its planning, including ports,



Why is quality and availability of ship-port interface data important?

Movement of the vessel

- Realizing safe and sustainable berth to berth navigation: where is my berth, when is my berth available?
- Important for shipping and terminals



Movement of the vessel's cargo

- Realizing sustainable end to end supply chain: where are my goods, when are my goods available for hinterland transport?
- Important for shippers



Why is data sharing by data owner important?

If data is not from data owner:

- Data becomes corrupt
- Data is not binding

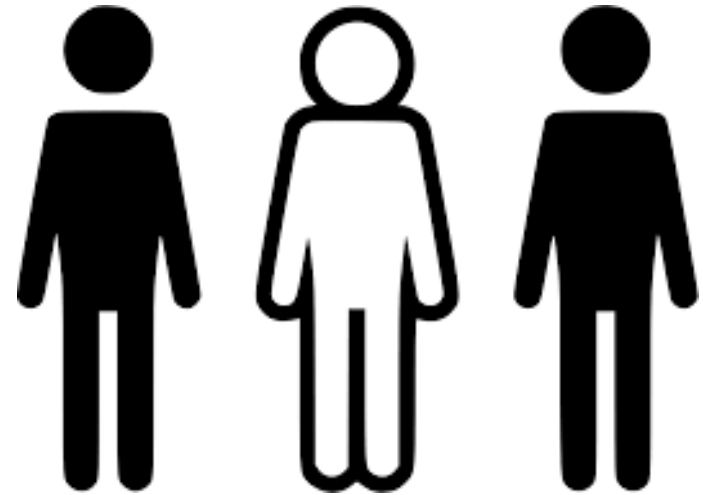


Why is this difficult to organize?

There may be different owners for one data element.

E.g. for depths or planning:

- Deep water route: national authority
- Fair ways / harbor basins: local authority
- Berths: terminal



Why is it difficult to share data?

- Each data user uses different standards and formats, or requires updates via e-mail, telephone or websites
- Each data user has different needs for updates



What is needed?

Data owners like to share data one to many:

- To minimize administrative burden
- To avoid errors
- To avoid delays in update
- To increase the value of data



One to many data sharing requires global standardization

Many different parties per vessel per port call:

- Shipping operates in a network of up to 9.000 different ports
- Each port has many different suppliers of cargo and ship services
- Ports can receive up to 55.000 different ships
- Each ship can have many different cargo owners, especially containers ships with 24.000 TEU



Standardization requires investments

- Investments in IT: change data to fit format and standards, change management of related data bases
- Investments in people: culture change



Investments require scoping

Scoping to justify investments, based on basics first:

- To be compliant with IMO, BIMCO contracts, authorities
- To have impact on IMO objectives



Investments require robust standardization bodies

To ensure lifetime span of investments, only use standardization bodies which:

- Have commitment from both shipping and ports: it is common sense and imperative that shipping and ports use the same standardization bodies ensuring ships do not need converters for all ports and ports need only one converter for all ships
- Are robust: to avoid incompatibility between standards and systems, and ultimately futile investments into implementing standards that are not fit-for-purpose, not future proof or not viable for all stakeholders across the supply chain



Investments require a road map per data set

To plan investment decisions, ensuring harmonized implementation and providing confidence that full interoperability with any API instance is coming:

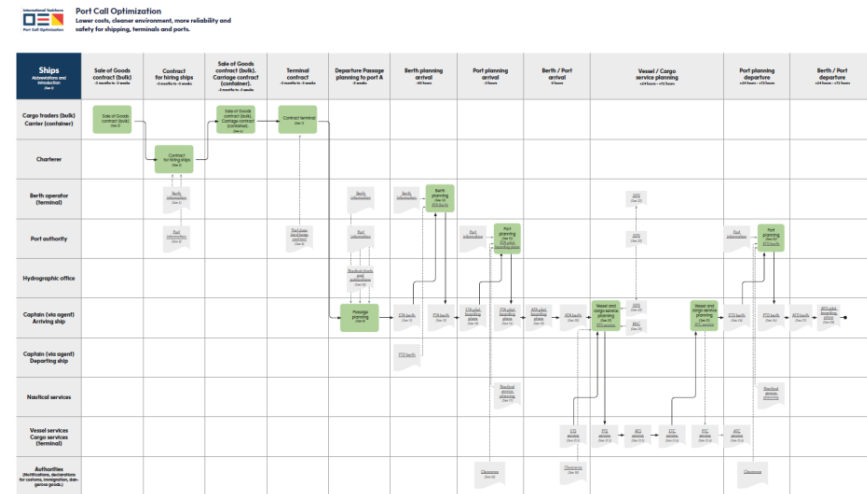
- 1) Data element definition; are we talking about same object
- 2) Logical data model: what is the relation between data elements
- 3) API specifications: how can we push data from system to system
- 4) Technical performance requirements: latency, security, confidentiality, availability, integrity
- 5) Business performance requirements: accuracy, completeness and timeliness



Scoping: agree on business process of port calls

To understand complete scope of data, data ownership and how actors work together, based on:

- IMO regulations
- BIMCO contracts
- Authorities
- Trade and port agnostic approach



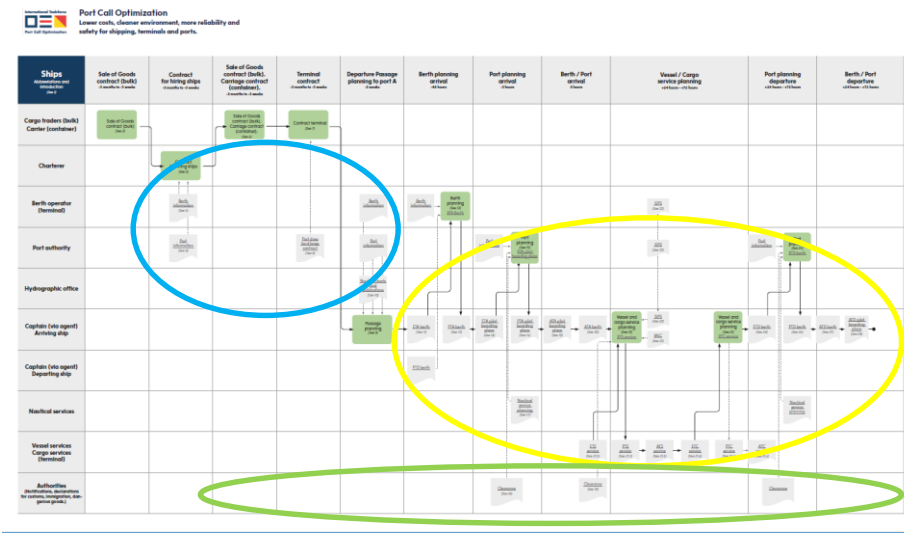
Last update April 6 2020



Scoping: agree on minimum scope of data

Priority in data sets:

- 1) Nautical data
- 2) Administrative data
- 3) Operational data



1) Nautical data - scope

Scope:

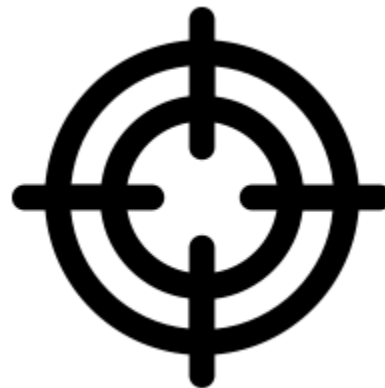
- a) General port data
- b) Maintained depths and/or soundings
- c) ID and location of terminals, berths and berth positions

Use cases:

- a) To be compliant with IMO Resolution A.862(20)
- b) To be compliant with IMO Resolution A.893(21)
- c) To be compliant with IMO Resolution A.893(21)

For all data elements:

- To demonstrate due diligence / absolute warranty re. safe port clause
- To demonstrate due diligence that Hydrographic Office and Port Authority have worked together to discharge their collective SOLAS responsibilities
- Allowing Master and Pilot to navigate the ship using the same Electronic Navigational Charts and Sailing Directions



1) Nautical data – scope - example

Terminal	Port	Nautical chart
APMTR	APM WZ & APM OZ EUROPAHAVN ZOZ	APM Terminal Rotterdam
Bollard 101 – 178	8179 – 8203 Bollard 101-178	8178 - 8203

1) Nautical data – robust standardization body

International Hydrographic Organization (IHO)

Because:

- From the start, IHO has been working with national hydrographic offices to create standards for nautical charts
- IHO being robust party for both shipping and port sector; has 93 Member States



1) Nautical data – road map

1) Data element definition:

- ✓ Submission marine harbor infrastructure (PIM)
- ✓ Submission definition UKC
- Submission definition heights of quay walls/ manifolds
- Submission definition berth operator / user
- Submission definition mooring facilities

2) Logical data model:

- POC to exchange terminal, berth, berth position

3) API specifications:

4) Technical performance requirements:

5) Business performance requirements:



1) Nautical data – road map - submission

Paper for Consideration by NIPWG

Background and Update on requirements for detailed terminal and berth information.

<i>Submitted by:</i>	IHMA – Ben van Scherpenzeel
<i>Executive Summary:</i>	An update on the development of Harbour Infrastructure Product Specification. Explaining the background and requirement for detailed information on terminal, berth and berth positioning.
<i>Related Documents:</i>	NIPWG letter 6/2019
<i>Related Projects:</i>	None

Background

There is a need to address the precise identification of:

- Terminal
- Berth
- Berth position

from the perspective of the end user for the prime purpose of navigational safety. Under IMO Resolution A.893(21) re. “Guidelines for Voyage Planning” a detailed plan should cover the entire voyage, from berth to berth. The

1) Nautical data – road map - submission

Data definitions for Under Keel Clearance (UKC)

Introduction

UKC is a very important aspect of discussions related to maintenance of deep water routes, fairways, basins and berths. Such maintenance is very costly and a few centimeters less depth already result in millions of savings. Same applies to maximum draught: one centimeter extra draught for a VLCC or 12.000 TEU vessel already result in 150 Tons more cargo, equivalent to 50.000 to 180.000 US\$, depending on type of cargo and market conditions.

Ports have their own UKC policies, which can be different in the approach versus e.g. at berth. UKC policy is also part of the charter party, the contract to hire a ship between owner and charterer. When a Captain is confronted with an UKC policy after boarding of the pilot, it may result in last minute discussions with headquarters whether the ship will breach the charter party clauses or not, a time when the bridge team should be focused on the safe port passage. Especially in deep water routes it is important for the bridge team to understand how much allowance is available for e.g. ship movement. For design, maintenance and navigation discussions it is beneficial to have a clear understanding about the data definitions related to UKC.

Current publications related to UKC

PIANC - report no.121-214

PIANC stands for Permanent International Association of Navigation Congresses. PIANC has worked on a standard for design of vertical channel dimensions in her report 121-214, chapter 2 together with IAPH, IALA and IMPA.

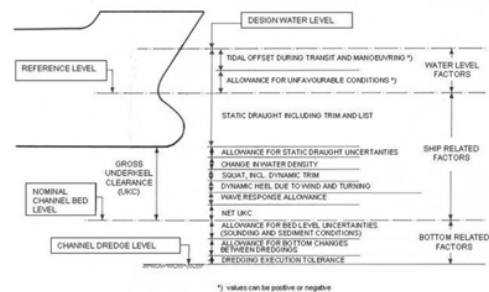


Image of PIANC Report no. 121-214

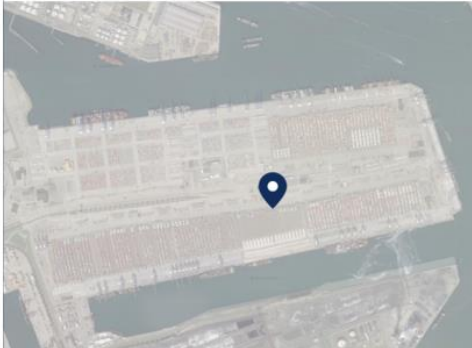
1) Nautical data – road map - POC

Document:

Data model for Port Call master data

Version: 0.2

Date: 18 aug 2020



Terminal

Global reference

Assigned ID: 1234567890124

Position

Latitude: 51.95316

Longitude: 4.05662

Hierarchy

Port: NLRTM

Attributes

Name: ECT Delta Terminal

SMDG: DBF, DCD, DDE, DDN

ISPS number: NLRTM-0071

4.4.1.3. INDIRECT REFERENCE

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

E.g. 1234567890124 for ECT Delta Terminal

4.4.1.4. DIRECT REFERENCE

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

E.g.: 51.95316, 4.05662 for ECT Delta Terminal

4.4.1.5. OTHER REFERENCES

Name of the terminal

ISPS number

SMDG code (for container / ro-ro sector only)

4.4.1.6. PROPOSED STORAGE IN S-57

Object acronym: HRBFAC (Point)

Attribute acronym: SORIND = Global Location Number (E.g.: NL,2R,pubIn,GLN:1234567890124) for ECT Delta Terminal)

Position: centre of gravity position

Attribute acronym: CATHAF = category of harbour facility (E.g.: 10 (container terminal))

Attribute acronym: OBJNAM = name of the terminal + SMDG code (E.g.: ECT Delta terminal - DBF, DCD, DDE, DDN)

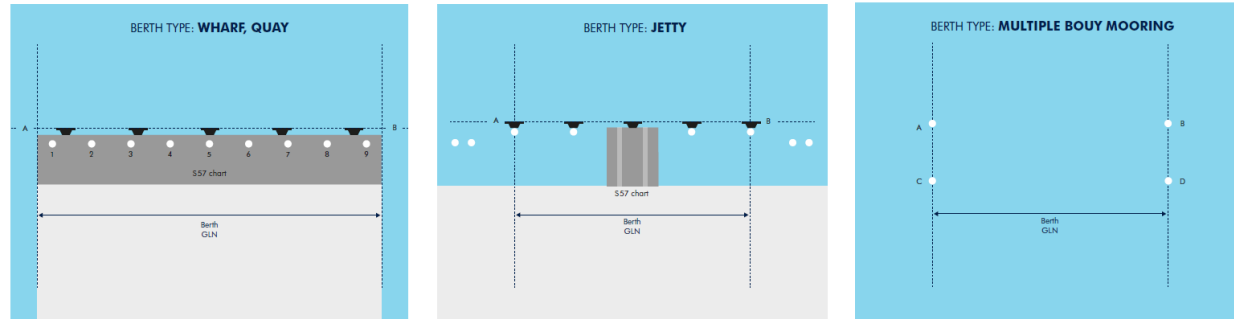
Attribute acronym: INFORM = ISPS Number (E.g.: ISPS Number:NLRTM-0071)

Attribute acronym: SORDAT = the production date of the source, e.g. the date of measurement

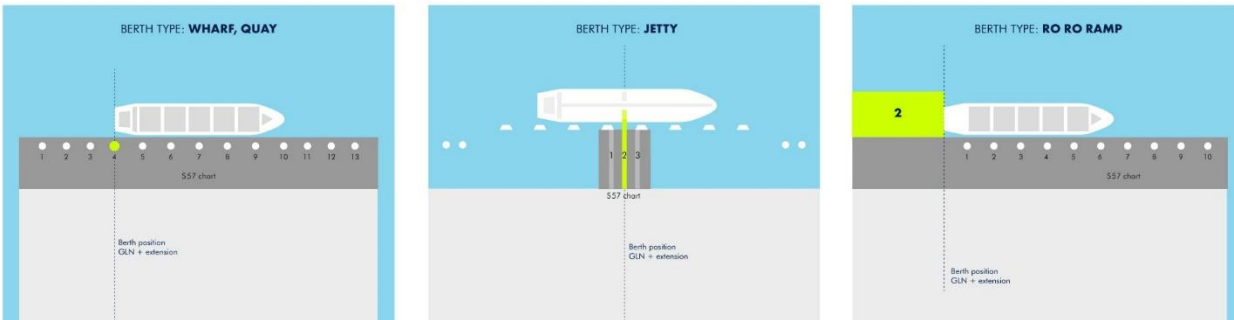
Attribute acronym: SCAMIN = Scale minimum (E.g.: 7999)

1) Nautical data – road map – industry input

1. BERTH



2. BERTH POSITION



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For ship-port interface data
Version 3.01



1) Nautical data – road map – results



NAUTICAL INFORMATION PROVISION WORKING GROUP

NIPWG Letter 5/2020

11 June 2020

NIPWG Members

Continuation of NIPWG activities

Ref: NIPWG letter 4/2020

Dear colleagues,

This letter discusses three items.

- The participation in, I call it, "Scoping Teams";
- The scoping work; and
- The video conferences set-up.

Scoping Team Participation

First, I would like to express my deepest impression on the number of volunteers who would like to contribute to the scope development of the two referred product specifications.

The participants are (order according to the confirmation received). I hope you're not disappointed that I used your first names. That simplifies the collection (and typing).

Name and Organisation	S-126 (Marine Physical Environment)	S-1xx (Marine Harbour Infrastructure)
Ben, NETHERLANDS (IHMA)		x

1) Nautical data – road map – results

5.3 Nautical Information Provision (NIPWG)					
5.3	S-49 – Mariners' Routing Guides (MRG)	HSSC12/..	HSSC agreed that S-49 Edition 2.1.0, as it stands, should be no longer maintained. MRG information to be provided by S-100 based products in the future as appropriate.		Decision
5.3	S-124 – Navigational Warnings	HSSC12/..	HSSC noted the progress made by the forthcoming S-124 PT on Navigational Warnings (Portrayal issues, Comms, etc.)... ...and tasked NCWG to consider S-124 PT request in regard to its recommendations on portrayal options.	NCWG-6	Decision
5.3	Maritime Services, e- navigation	HSSC12/.. (former HSSC11/36)	HSSC tasked the responsible HSSC WGs [and will invite also the IRCC/WWNWS-SC] to review the initial descriptions of "Maritime Services in context of e-navigation" under their remit and to provide them to NIPWG for further action if appropriate.	Permanent	
5.3	Marine Harbour Infrastructure	HSSC12/..	HSSC agreed on the allocation of S-131 to the Marine Harbour Infrastructure Product Specification. IHO Sec. to update S-100 webpage and Registry		Decision
5.3	S-100 Secretariat	HSSC12/..	HSSC agreed on the allocation of S-100 Secretariat to the Marine Harbour Infrastructure Product Specification.	Decision 11	

1) Nautical data – road map – results

OFFICIAL

Dear S-129 Project Team Members,

I have been asked to forward to you the attached proposal from the IHMA regarding UKC definitions.

The proposal is regarding Under Keel Clearance (UKC) definitions, based on:

- Existing publications of PIANC, NP100 and industry
- Cross checks with shipping
- Cross checks with ports
- Real time testing during discussions with Port of Gothenburg and Rotterdam, their pilots and national administrations regarding dredging policies

If you have anything you would like to see added or amended in the attached 'UKC definitions' document, please include these in the 'Comment form' (also attached), and return to me by COB 30 October 2020.

For all addressees, if you no longer wish to receive S-129 Project Team correspondence, please advise by return email.

Regards,

2) Administrative data – scope

Scope:

- a) IMO GISIS data base up to date for ID port facility
- b) IMO FAL Compendium implementation
- c) Planning of boarding and clearances

Use cases:

- a) To be compliant with IMO SOLAS Regulation XI-2/13.4
- b) To be compliant with ISPS and regional, national and local authorities, having an impact on the Master's availability for safe navigation and swift clearance of ship and cargo
- c) To be compliant with MLC, having impact on planning cargo operations, rest hours and shore leave



2) Administrative data – scope - example

Port A

Port B

Port C

CREW'S EFFECTS DECLARATION

DÉCLARATION DES EFFETS DE L'ÉQUIPAGE

1. Name of ship - Nom du navire

2. Effects which are dutiable or subject to prohibitions or restrictions
Effets qui sont imposables ou soumis à des interdictions ou de restrictions

3. Nationality of ship - Nationalité du navire

4. No. N°

5. Family name, given names
Nom de famille, prénoms

Cigarettes
Cigares
No. - N°

Spices and
Tobacco
Tabac
kg

Wine and
alcohol
vins
et alcools
litres

Beer and ale
Bière et ale
litres

Currency
Espèces

Other articles
Autres articles

Signature

Page

Articles removed from the vessel must be reported to the proper border services officer. Serious penalties are provided for violation of the Customs Act. Please read the notice on the reverse side of this form.

Les articles qui sont retirés du navire doivent être déclarés à l'agent des services frontaliers intéressé. Des amendes considérables sont prévues dans les cas d'infraction à la Loi sur les douanes. Veuillez lire l'avis au verso de ce formulaire.

DEPARTMENT OF HOMELAND SECURITY
U.S. Customs and Border Protection

OMB 1651-0020
Exp. 07-31-2018
Page No.

CREW'S EFFECTS DECLARATION
19CFR 4.7(a), 4.7a(b)

1. Name of ship

2. Nationality of ship

3. No.

4. Family name, given name

5. Rank or rating

6. Articles acquired abroad by officers and members of the crew (except those exclusively for use en voyage or cleared through U.S. Customs and Border Protection authorities)

7. No. of crewmember's declaration of articles intended to be landed (if none, show "NONE" opposite name)

8. Date and signature by master, authorized agent or officer

9. Date and signature by master, authorized agent or officer

Paperwork Reduction Act Statement: An agency may not conduct or sponsor an information collection and a person is not required to respond to this information unless it displays a current valid OMB control number and an expiration date. The control number for this collection is 1651-0020. The estimated average time to complete this application is 60 minutes. If you have any comments regarding the burden estimate you can write to U.S. Customs and Border Protection, Office of Regulations and Rules, 750 8th Street, NW, Washington DC 20525.

CBP Form 1304 (06/09)

IMO CREW'S EFFECTS DECLARATION
(IMO FAL Form 4)

1.1 Name of ship

1.2 IBCD number

1.3 Call sign

1.4 Voyage number

2. Flag State of ship

3. No.

4. Family name, given names

5. Rank or rating

6. Effects, in/light for value from customs duties and taxes or subject to prohibitions or restrictions

7. Signature

8. Date and signature by master, authorized agent or officer

9. Date and signature by master, authorized agent or officer

e.g., rifles, pistols, cigarettes, tobacco, etc.

2) Administrative data – robust standardization body

IMO Facilitation (FAL), with ISO, WCO, UNECE

Because:

- From the start, IMO FAL was assigned to set standards for notifications and declarations
- IMO being robust party for both shipping and port sector has 174 Member States



2) Administrative data – road map

- 1) Data element definition:
 - ✓ Submission for arrival/departure times
 - Time stamp definitions for boarding / clearances by authorities
- 2) Logical data model:
 - IMO FAL EGDH contacting ISO TC8 for proposal, compatible with administrative, navigational and supply chain data, governance for data owner
- 3) API specifications:
- 4) Technical performance requirements:
- 5) Business performance requirements:



2) Administrative data – road map - submission



E

FACILITATION COMMITTEE
43rd session
Agenda item 7

FAL 43/7/1
1 February 2019
Original: ENGLISH

**REVIEW AND REVISION OF THE IMO COMPENDIUM ON FACILITATION AND
ELECTRONIC BUSINESS, INCLUDING ADDITIONAL E-BUSINESS SOLUTIONS**

Proposal for amendments to the IMO Compendium
on Facilitation and Electronic Business

Submitted by Liberia, Marshall Islands and BIMCO

SUMMARY

Executive summary: Recalling the ongoing work in the informal Correspondence Group on harmonization of data definitions and map relationships among data

FAL 44/6
Annex, page 36

Change indicator	Data element number	Data element	Definitions	Format	Code lists	Business rules
+		Date and time of arrival - planned	The date and time the ship plans to arrive at a specified location, PTA.	an..35		BR 01
+		Date and time of departure - requested	The date and time the ship is requested to depart from a specified location, RTD.	an..35		BR 01
+		Date and time of departure - planned	The date and time the ship plans to depart from a specified location, PTD.	an..35		BR 01

2) Administrative data – road map – industry input

Arrival Time Pilot Boarding Place

			
ETA PBP Estimated Time of Arrival Pilot Boarding Place <i>Data owner: Vessel</i>	RTA PBP Requested Time of Arrival Pilot Boarding Place <i>Data owner: Port</i>	PTA PBP Planned Time of Arrival Pilot Boarding Place <i>Data owner: Vessel</i>	ATA PBP Actual Time of Arrival Pilot Boarding Place <i>Data owner: Vessel</i>

Arrival Time Berth

			
ETA BERTH Estimated Time of Arrival Berth <i>Data owner: Vessel</i>	RTA BERTH Requested Time of Arrival Berth <i>Data owner: Terminal</i>	PTA BERTH Planned Time of Arrival Berth <i>Data owner: Vessel</i>	ATA BERTH Actual Time of Arrival Berth <i>Data owner: Vessel</i>

Departure Time Berth

			
ETD BERTH Estimated Time of Departure Berth <i>Data owner: Vessel</i>	RTD BERTH Requested Time of Departure Berth <i>Data owner: Port</i>	PTD BERTH Planned Time of Departure Berth <i>Data owner: Vessel</i>	ATD BERTH Actual Time of Departure Berth <i>Data owner: Vessel</i>

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Version 3.01



2) Administrative data – road map - results

→ ↻ 🏠 https://www.youtube.com/watch?v=xD_rJQ4_SAw&feature=youtu.be

YouTube^{NL} Zoeken 🔍

The diagram illustrates a set of administrative data fields organized into a grid-like structure. A red circle highlights the 'IMO Compendium' field. The fields are connected by dashed lines, suggesting relationships or data flow. The fields include:

- IMO Compendium (highlighted with a red circle)
- Message Header
- Issuer P.
- Auth.
- Location
- Voyage
 - Reference Number
 - Location in Port
 - Brief Description
- Itinerary
 - Sequence Number
 - Port Code
 - Security Level
- Security
 - Coded Description
- Person on board
 - Type, coded
 - Family name
 - Nationality
- Identity
- Visa
- Crew Effects
- Ship
 - Call sign
 - IMO number
 - Gross Tonnage
- INMARSAT #
- Ship Registry
- ISCC
 - Coded Description

1:38 / 3:06

https://www.youtube.com/watch?v=xD_rJQ4_SAw&feature=youtu.be

2) Administrative data – road map - results

The group of experts which will help draft the new JIT clause consist of Raoul Baart from Anthony Veder and Paul Brown from Ineos. They both have first-hand experience with the successful commercial application of JIT in their tanker trade. The group also includes North P&I's Steve Cockburn, who can provide Freight, Demurrage & Defence (FD&D) expertise and bring previous experience from assisting in the development of BIMCO's Sea Traffic Management Clause. The drafting team will also produce a clause promoting the use of IMO data elements for communicating ship arrival and departure information in a standard "global" format between ships and ports. A first draft of the new clauses will be reviewed by BIMCO's Documentary Committee at their next meeting in January 2021.

3) Operational data - scope

Scope:

- a) Arrival/departure times at berth and pilot boarding place
- b) Starting/completion times of cargo and ship services
- c) Notifications of ISPS clearances for cargo and ship services, and for crew changes and crew visitors

Use cases:

- a) Just In Time Arrivals, safe navigation
- b) To be compliant with MLC rest hour planning, ISPS and has an impact on Just In Time Arrivals and safe navigation
- c) To avoid delays of starting services which has an impact on Just In Time Arrivals and safe navigation and to avoid crew frustration not being able to go ashore or to see family



3) Operational data – scope - example

Shipper	Shipping	Terminal	Port																																																																																			
<div>Booking confirmation: Vessel : MOL TRADITION Voyage Code : JOTD012E Pre B/L No.: Estimated Sailing Date : 23/11/2020 Estimated Berthing Date : 21/11/2020 Estimated E.T.A. (PVY) : 23/12/2020 Voyage Details ; Place of Receipt : ROTTERDAM, NETHERLANDS Port of Loading : ROTTERDAM, NETHERLANDS Port of Discharge : SINGAPORE Place of Delivery : JAKARTA, INDONESIA JAKARTA INTL Container Service : CY/CY</div>		<table><tr><th>Arrival at pilot station</th><th>All fast</th><th>First lift</th><th>Last lift</th><th>Last line</th></tr><tr><td>21-09-2020 14:00</td><td>21-09-2020 20:00</td><td>21-09-2020 21:00</td><td>22-09-2020 18:00</td><td>22-09-2020 19:00</td></tr><tr><td>21-09-2020 15:00</td><td>21-09-2020 17:30</td><td>21-09-2020 18:30</td><td>22-09-2020 18:00</td><td>22-09-2020 19:00</td></tr><tr><td>22-09-2020 05:00</td><td>22-09-2020 07:30</td><td>22-09-2020 08:30</td><td>23-09-2020 02:00</td><td>23-09-2020 03:00</td></tr><tr><td>22-09-2020 06:00</td><td>22-09-2020 11:30</td><td>22-09-2020 12:30</td><td>22-09-2020 22:00</td><td>22-09-2020 23:00</td></tr><tr><td>19-09-2020 18:00</td><td>19-09-2020 20:00</td><td>19-09-2020 21:00</td><td>22-09-2020 22:59</td><td>22-09-2020 23:00</td></tr><tr><td>22-09-2020 01:00</td><td>22-09-2020 03:00</td><td>22-09-2020 04:00</td><td>22-09-2020 22:59</td><td>22-09-2020 23:59</td></tr><tr><td>21-09-2020 09:30</td><td>21-09-2020 13:00</td><td>21-09-2020 14:00</td><td>23-09-2020 01:00</td><td>23-09-2020 02:00</td></tr></table>	Arrival at pilot station	All fast	First lift	Last lift	Last line	21-09-2020 14:00	21-09-2020 20:00	21-09-2020 21:00	22-09-2020 18:00	22-09-2020 19:00	21-09-2020 15:00	21-09-2020 17:30	21-09-2020 18:30	22-09-2020 18:00	22-09-2020 19:00	22-09-2020 05:00	22-09-2020 07:30	22-09-2020 08:30	23-09-2020 02:00	23-09-2020 03:00	22-09-2020 06:00	22-09-2020 11:30	22-09-2020 12:30	22-09-2020 22:00	22-09-2020 23:00	19-09-2020 18:00	19-09-2020 20:00	19-09-2020 21:00	22-09-2020 22:59	22-09-2020 23:00	22-09-2020 01:00	22-09-2020 03:00	22-09-2020 04:00	22-09-2020 22:59	22-09-2020 23:59	21-09-2020 09:30	21-09-2020 13:00	21-09-2020 14:00	23-09-2020 01:00	23-09-2020 02:00	<p>Legend: [] Operation (loading/unloading) [] Berth before/after operation [] Berth occupancy [] Workload for operation</p> <p>Summary Table: Number of used QCs in each time step (t) ∈ Q_t Number of available QCs</p>	<div>Reizen 122 reizen Zoeken: <input type="text"/> Schip HERSTEL Bezo</div> <table><tr><th>Soort reis</th><th>Scheepsnaam</th><th>Begin</th></tr><tr><td>Inkomend</td><td>STENA FORERUNNER</td><td>23 sep 15:15 (ETA Maascenter)</td></tr><tr><td>Inkomend</td><td>MOL TRIUMPH</td><td>23 sep 15:45 (ETA Euro 13)</td></tr><tr><td>Inkomend</td><td>A2B COMFORT</td><td>23 sep 16:00 (ETA Maascenter)</td></tr><tr><td>Inkomend</td><td>STENA HOLLANDICA</td><td>23 sep 16:00 (ETA Maascenter)</td></tr><tr><td>Inkomend</td><td>VERA D</td><td>23 sep 16:15 (ETA Maascenter)</td></tr><tr><td>Inkomend</td><td>A2B SPIRIT</td><td>23 sep 16:30 (ETA Maascenter)</td></tr><tr><td>Inkomend</td><td>STENA NATALITA</td><td>23 sep 16:30 (ETA Maascenter)</td></tr><tr><td>Inkomend</td><td>USICHEM</td><td>23 sep 17:15 (ETA Maascenter)</td></tr><tr><td>Inkomend</td><td>WILSON DAVANGER</td><td>23 sep 19:30 (ETA Maascenter)</td></tr><tr><td>Inkomend</td><td>AUTOSKY</td><td>23 sep 19:30 (ETA Maascenter)</td></tr><tr><td>Inkomend</td><td>ATLANTIC COAST</td><td>23 sep 19:45 (ETA Maascenter)</td></tr><tr><td>Inkomend</td><td>MOL EMISSARY</td><td>23 sep 20:00 (ETA Maascenter)</td></tr><tr><td>Inkomend</td><td>CHRISTINA</td><td>23 sep 20:00 (ETA Maascenter)</td></tr></table>	Soort reis	Scheepsnaam	Begin	Inkomend	STENA FORERUNNER	23 sep 15:15 (ETA Maascenter)	Inkomend	MOL TRIUMPH	23 sep 15:45 (ETA Euro 13)	Inkomend	A2B COMFORT	23 sep 16:00 (ETA Maascenter)	Inkomend	STENA HOLLANDICA	23 sep 16:00 (ETA Maascenter)	Inkomend	VERA D	23 sep 16:15 (ETA Maascenter)	Inkomend	A2B SPIRIT	23 sep 16:30 (ETA Maascenter)	Inkomend	STENA NATALITA	23 sep 16:30 (ETA Maascenter)	Inkomend	USICHEM	23 sep 17:15 (ETA Maascenter)	Inkomend	WILSON DAVANGER	23 sep 19:30 (ETA Maascenter)	Inkomend	AUTOSKY	23 sep 19:30 (ETA Maascenter)	Inkomend	ATLANTIC COAST	23 sep 19:45 (ETA Maascenter)	Inkomend	MOL EMISSARY	23 sep 20:00 (ETA Maascenter)	Inkomend	CHRISTINA	23 sep 20:00 (ETA Maascenter)
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3) Operational data – robust standardization body

IMO Facilitation (FAL) – with ISO, WCO, UNECE

Because:

- Time stamps serve both administrative and operational data, it is common sense to develop them under the same body and build on existing work



3) Operational data – road map

1) Data element definition:

- ✓ Submission for including operational data FAL 44/18/2
- ✓ Submission for starting/completion times FAL EGDH 2/XX
- ✓ Proposal to IPCDMC/IALA to harmonize with IMO FAL
- Submission for PS to replace S-211 with IALA input
- Definitions for ISPS clearances
- Definition Notified Time of Arrival (Port of Newcastle) for BIMCO Documentary Committee?

2) Logical data model:

- IMO FAL EGDH contacting ISO TC8 for proposal, compatible with administrative, navigational and supply chain data, governance for data owner

3) API specifications:

4) Technical performance requirements:

5) Business performance requirements:



3) Operational data – road map - submission



E

FACILITATION COMMITTEE
44th session
Agenda item 18

FAL 44/18/2
17 January 2020
Language: ENGLISH
Pre-session public release: ☒

WORK PROGRAMME

Development of guidelines for harmonized communication and electronic exchange of operational data for port calls

Submitted by China, Liberia, Morocco, Singapore, BIMCO, IAPH, IHMA, IPCSA

SUMMARY

Executive summary:

This document contains a proposal for inclusion of a new output in the agenda of the FAL Committee to develop guidelines for harmonized communication and electronic exchange of

3) Operational data – road map - submission



E

EXPERT GROUP ON DATA
HARMONIZATION
Xst session
Agenda item X

EGDH X/X
Xxxx 2020

Original: ENGLISH ONLY
Pre-session public release: ☒



IMO DATA SET RELATED TO “PORT LOGISTIC OPERATIONAL DATA RELATED TO JUST IN TIME CONCEPT”

IMO reference data model

Submitted by BIMCO, IAPH, IHMA

SUMMARY

Executive summary: The document provides input to the IMO reference data model on port logistic operational data and real time data, in order to allow easy implementation of the IMO Just-In-Time Concept.

Strategic direction, if applicable: 5

Output: 5.8

3) Operational data – road map – proposal

From: International Harbour Masters Association

To: International Port CDM Council Secretariat

Date: July 3, 2020

Subject: Proposal to work together on a New Proposal to IEC for a port call message format

Dear Mr. Bergmann,

We would like to thank you for the great work that the IPCDM council and its working team have achieved towards climate change mitigation.

Ports, terminals and shipping are facing an enormous challenge to reduce emissions from shipping. One of the possible measures identified by IMO GIA is Just In Time (JIT) Arrivals. One of the barriers for JIT Arrivals is the real time exchange of time stamps related to the port call process.

We are of the understanding that concerns have potentially been raised that the current suggested data model for time stamps, S-211, may not be as complete a solution as initially considered. We would like to encourage Port CDM and all other relevant stakeholders to work together to find a robust, single standard which could be endorsed by the proper authority (IMO FAL) so that the digital transformation of the marine industry continues to move forward.

To address this, and make best use of S-211 development, the proposal is to:

- Work together with all other relevant stakeholders to address the potential gaps and if required develop a new proposal to IEC, which gives confidence to the industry to invest and accelerate digitization in the ship-port interface.

Sincerely,

IHMA

3) Operational data – road map – industry input

Start / Completion Services

			
ETS/ETC ... Estimated Time of Start / Completion Services <i>Data owner: Service prov.</i>	RTS/RTC ... Requested Time of Start / Completion Services <i>Data owner: Vessel</i>	PTS/PTC ... Planned Time of Start / Completion Services <i>Data owner: Service prov.</i>	ATS/ATC ... Actual Time of Start / Completion Services <i>Data owner: Service prov.</i>

PORT INFORMATION MANUAL ©

For ship-port interface data

Version 3.01



3) Operational data – road map - results



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COUNCIL
124th session
Agenda item 10

C 124/10/4
10 October 2020
Original: ENGLISH
Pre-session public release: ☐

SUPPLEMENTARY AGENDA ITEMS

Urgent matters emanating from the forty-fourth session of the FAL Committee

Note by the Secretary-General

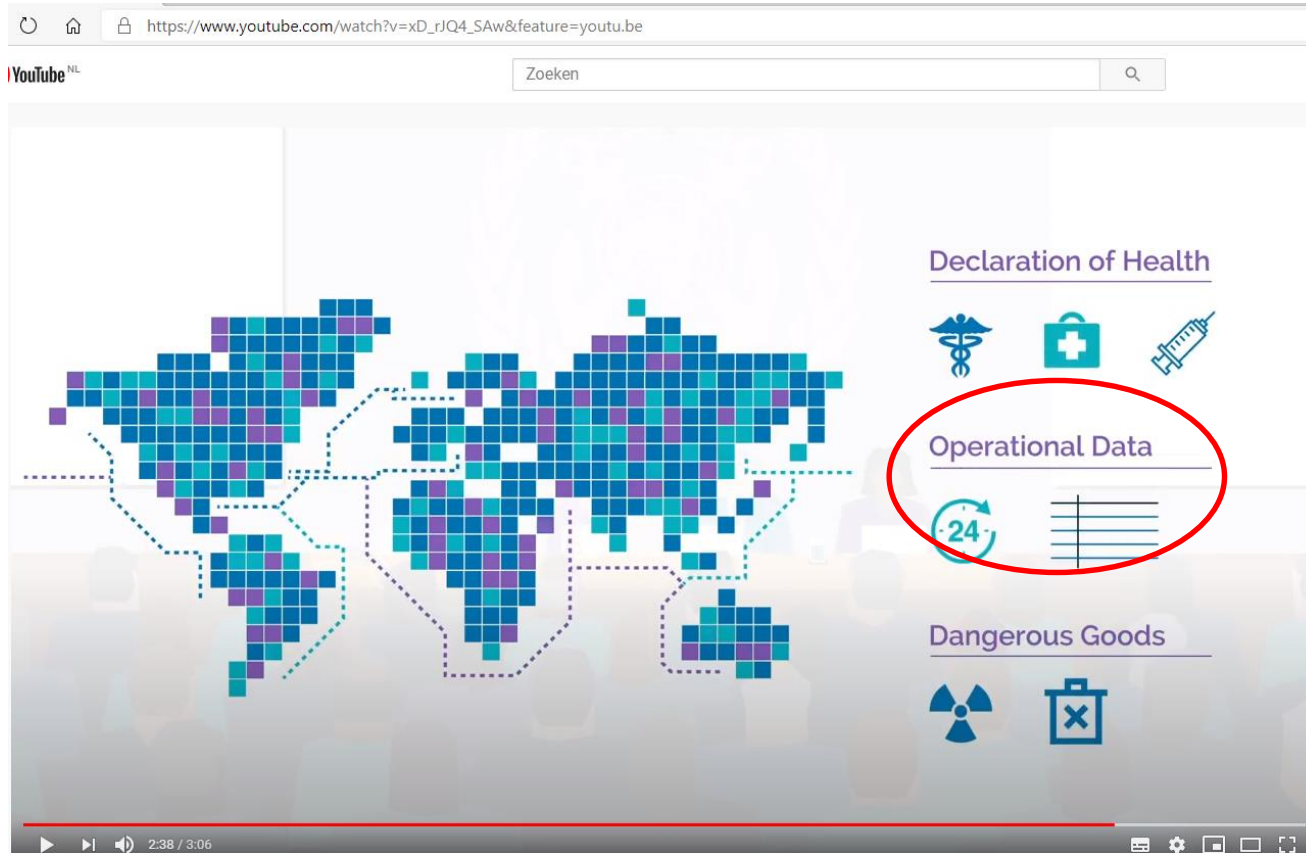
SUMMARY

Action requested of the Council

5 The Council is invited to note the information provided and to take action, as appropriate, in particular to:

- 1 endorse the new FAL Committee output on "Development of guidelines for harmonized communication and electronic exchange of operational data for port calls" (paragraphs 2 and 3); and
- .2 endorse the holding of two intersessional meetings of the EGDH in 2021 (paragraph 4).

3) Operational data – road map - results



https://www.youtube.com/watch?v=xD_rJQ4_SAw&feature=youtu.be

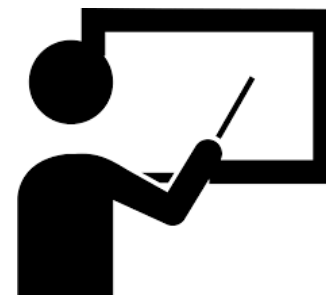
Incentives for data owners

- IMO and Industry can promote together implementation of guidance
 - IMO by publication on their social media
 - Industry by agreeing on certification of implementation
-
- Submission to IMO to realize incentives for first movers
 - Industry to pull together group of first movers from shipping, ports and shippers willing to invest in global standards



Guidance for data owners

- Most shipping lines and ports have limited IT resources
 - IMO cannot identify standardization bodies or enforce the use of standards in national waters; however IMO can adopt performance standards through resolutions
 - IMO can provide non mandatory instrumental guidance, referencing to industry standards as per Resolution A.911(22)
-
- ✓ Submission to IMO to develop guidance
 - ✓ Submission to update MS4 Port Support Service with IHMA/IAPH/BIMCO
 - Submission to organize a neutral, not for profit global platform for data sharing – aligning with local PCS / IPCSA – contact IPCSA, Navelink





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FACILITATION COMMITTEE
44th session
Agenda item 18

FAL 44/18/2
17 January 2020
Language: ENGLISH
Pre-session public release: ☒

WORK PROGRAMME

Development of guidelines for harmonized communication and electronic exchange of operational data for port calls

Submitted by China, Liberia, Morocco, Singapore, BIMCO, IAPH, IHMA, IPCSA

SUMMARY

Executive summary: This document contains a proposal for inclusion of a new output in the agenda of the FAL Committee to develop guidelines for harmonized communication and electronic exchange of

MS4 – Port Support Service

4.1 Submitting organization

IHMA

4.2 Coordinating body

IMO

4.3 Description of the Maritime Service

Port Support Service (PSS) is defined as a digital service to improve the quality and availability of standardized data in support of a ship calling at a port. It provides information to organize and support the port call and varies depending on the local needs.

Examples of PSS include:

Data for notifications/declarations in port:

- 1) IMO GISIS data base
- 2) Data with IMO FAL Compendium data format / structure
- 3) Planning of clearances

Nautical port data:

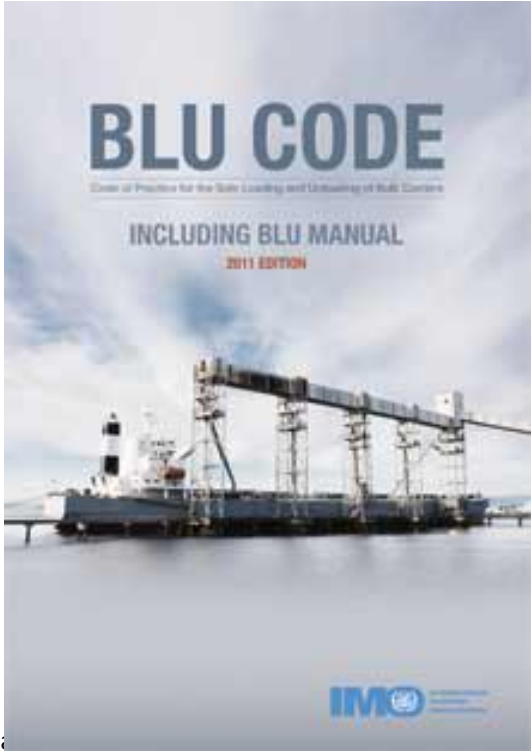
- 1) General port information
- 2) Maintained depths and/or soundings
- 3) Terminal, berth and berth positions

Guidance for data owners - examples

BLU CODE

Port Information Manual

Just In Time Arrival Guide



Summary

- Ship–port interface data is fundamental for safe and sustainable shipping
- Data quality and availability requires sharing by data owners
- Data owners like to share one to many
- One to many requires standardization and investments, to be realized by:
 - 1) Agree on business process of port calls
 - 2) Agree on minimum scope of data
 - 3) Agree on robust standardization bodies
 - 4) Agree on road map per data set
 - 5) Develop incentives for data owners
 - 6) Develop guidance for data owners
- This requires collaboration between IMO and Industry



FAQ 1

Current situation:

- Shipping is 5000 years old
- Roughly 80% of goods is transported by sea

Question:

- Why is the use of standards not more implemented?
- Why is shipping not connected to supply chain?

Answer:

- Old and fragmented industry, no big players able to push
- Also in supply chain no big players to push
- Shipping and ports had limited collaboration



FAQ 2

Current situation:

- Today there's no roadmap to realize full interoperability per data set
- Shipping lines and ports who like to be first movers are developing in isolation
- Shipping lines and ports are happy to work with IMO FAL and IHO, BUT they need a road map with robust standards to plan investments for data changes

Question:

- How do we realize a road map per data set together with IMO / IHO, allowing first movers to be part of this?

Answer:

- IMO / IHO will be informed about need for road map
- First movers can offer testing of standards to IMO / IHO



International Taskforce



Port Call Optimization

